

City Commission Meeting
SUPPLEMENTAL MATERIAL

**City Hall, Commission Chambers, 3rd Floor, 1700 Convention Center Drive
March 8, 2006**

Mayor David Dermer
Vice-Mayor Saul Gross
Commissioner Matti Herrera Bower
Commissioner Simon Cruz
Commissioner Luis R. Garcia, Jr.
Commissioner Jerry Libbin
Commissioner Richard L. Steinberg

City Manager Jorge Gonzalez
City Attorney Murray H. Dubbin
City Clerk Robert E. Parcher

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ATTENTION ALL LOBBYISTS

Chapter 2, Article VII, Division 3 of the City Code of Miami Beach entitled "Lobbyists" requires the registration of all lobbyists with the City Clerk prior to engaging in any lobbying activity with the City Commission, any City Board or Committee, or any personnel as defined in the subject Code sections. Copies of the City Code sections on lobbyists laws are available in the City Clerk's office. Questions regarding the provisions of the Ordinance should be directed to the Office of the City Attorney.

CONSENT AGENDA

C7 - Resolutions

- C7K A Resolution Approving The Proposed Final Plat Of "Villagio Bay I", Being A Replat Of Lots 6 And 7 Of Lincoln Terrace Subdivision And "Villagio Bay II," A Replat Of Lots 5, 6, 7, 8, & 9 Of Bay Lincoln Subdivision, City Of Miami Beach, Miami-Dade County Florida, And Authorizing The Appropriate City Officials To Execute The Plat On Behalf Of The City.
(Public Works)
(Revised Exhibit)

- C7S A Resolution Waiving, By 5/7ths Vote, The Formal Competitive Bidding Requirements, Finding Such Waiver To Be In The Best Interest Of The City, And Authorizing The City Manager, Through His Designee, Who Shall Be The City's Property Management Director, A Licensed General Contractor, To Select, Negotiate, And Award All Contracts, Agreements, Purchase Orders, And Change Orders For The Purchase Of All Necessary Goods And Construction Services Relative To The Ongoing Repair And Maintenance Including, Without Limitations, The Replacement Of Air Conditioning Systems, Roof Replacement, And Pressure Cleaning, Waterproofing, And Painting Requirements Of The Miami City Ballet Building, A City Owned Facility Located At 2200 Liberty Avenue, Miami Beach, Florida; Providing That All Documents Be Reviewed By The Appropriate Members Of The Administration And City Attorney's Office, And Which Shall Contain Those Minimum Terms And Conditions As Set Forth In This Resolution; And Further Authorizing The City Manager And/Or The Mayor And City Clerk To Execute Any And All Agreements Relative To The Aforestated Repair And Maintenance Projects, Provided Further, That The Total Amount Of The Aforestated Repair And Maintenance Projects Shall Not Exceed \$740,000 Without The Prior Approval Of The City Commission.

(Page)

(Public Works)

(Resolution)

R7 - Resolutions

- R7D A Resolution Approving The Agreement Between International Business Machines (IBM) Corporation And The City Of Miami Beach, For The Design, Deployment, And Management Of A Citywide Wireless Network (Wi-Fi); In The Base Estimated Amount Of \$4,498,800, Which Includes The Cost For The Network Infrastructure, Architecture And Design Services, Installation, And Six (6) Years Of Operation, Maintenance, Project Management, Support And Warranty Services; Option No. 2 For A 100% Citywide Access In The Estimated Amount Of \$669,000; Project Contingency In The Amount Of \$248,771; Acceptance Of Public Benefits Offered By IBM; Authorizing The Mayor And City Clerk To Execute An Agreement With IBM; And Further Appropriating Funds In The Amount Of \$1,886,652 From The Information And Communication Technology Fund.

(Finance Department)

(Contract)

SUPPLEMENTAL MATERIAL

FOR ITEM C7K:

REVISED EXHIBIT "A"

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RESOLUTION NO. _____

A RESOLUTION OF THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA, WAIVING, BY 5/7THS VOTE, THE FORMAL COMPETITIVE BIDDING REQUIREMENTS, FINDING SUCH WAIVER TO BE IN THE BEST INTEREST OF THE CITY, AND AUTHORIZING THE CITY MANAGER, THROUGH HIS DESIGNEE, WHO SHALL BE THE CITY'S PROPERTY MANAGEMENT DIRECTOR, A LICENSED GENERAL CONTRACTOR, TO SELECT, NEGOTIATE, AND AWARD ALL CONTRACTS, AGREEMENTS, PURCHASE ORDERS, AND CHANGE ORDERS FOR THE PURCHASE OF ALL NECESSARY GOODS AND CONSTRUCTION SERVICES RELATIVE TO THE ONGOING REPAIR AND MAINTENANCE INCLUDING, WITHOUT LIMITATIONS, THE REPLACEMENT OF AIR CONDITIONING SYSTEMS, ROOF REPLACEMENT, AND PRESSURE CLEANING, WATERPROOFING, AND PAINTING REQUIREMENTS OF THE MIAMI CITY BALLET BUILDING, A CITY OWNED FACILITY LOCATED AT 2200 LIBERTY AVENUE, MIAMI BEACH, FLORIDA; PROVIDING THAT ALL DOCUMENTS BE REVIEWED BY THE APPROPRIATE MEMBERS OF THE ADMINISTRATION AND CITY ATTORNEY'S OFFICE, AND WHICH SHALL CONTAIN THOSE MINIMUM TERMS AND CONDITIONS AS SET FORTH IN THIS RESOLUTION; AND FURTHER AUTHORIZING THE CITY MANAGER AND/OR THE MAYOR AND CITY CLERK TO EXECUTE ANY AND ALL AGREEMENTS RELATIVE TO THE AFORESTATED REPAIR AND MAINTENANCE PROJECTS; PROVIDED FURTHER, THAT THE TOTAL AMOUNT OF THE AFORESTATED REPAIR AND MAINTENANCE PROJECTS SHALL NOT EXCEED \$740,000 WITHOUT THE PRIOR APPROVAL OF THE CITY COMMISSION.

WHEREAS, at its February 8, 2006 meeting, the Mayor and City Commission adopted Resolution No. 2006-26125, that approved the purchase of the Miami City Ballet building, located at 2200 Liberty Avenue, Miami Beach, Florida (the Building); and

WHEREAS, the Resolution provided for the City to fund approximately \$740,000 for imminent major capital repair and replacement needs of the Building, which consist of: roof replacement (\$500,000); the replacement of five rooftop air conditioning units (\$175,000); and pressure-cleaning, waterproofing, and painting of the building exterior (\$65,000); and

WHEREAS, the Administration has determined that due to the existing condition of the Building and in order for the City to properly continue to maintain the Building, the aforestated repair and maintenance projects need to be completed in an expeditious manner; and

WHEREAS, it is the Administration's intent to secure the construction work relative to said projects utilizing the City's Property Management Director, who is a licensed general contractor, and his staff; and

Agenda Item C7S
Date 3-8-06

WHEREAS, additionally, the Administration, through the Property Management Director, acting as General Contractor above, may require the need for the acquisition of goods and services which may exceed the \$25,000 threshold correctly within the City Manager's discretion; and

WHEREAS, as a result of the time needed to complete the formal bid processes (i.e. 90-120 days), each time that the Property Management Director has a need to augment his existing resources for goods and services, in excess of \$25,000, the projects will be placed on hold or delayed significantly; and

WHEREAS, the Property Management Director, as the general contractor, will be taking on the responsibility of the completion of the aforesated vital repair and maintenance projects; and

WHEREAS, in order to diligently prosecute the required work to timely complete the projects, the Administration would recommend that the Mayor and City Commission waive, by 5/7ths vote, the formal competitive bidding requirements, finding such waiver to be in the City's best interest and hereby enabling the Administration, through its Property Management Director acting as General Contractor, to procure the required goods and services to complete the projects, on an expedited basis; and

WHEREAS, notwithstanding the Mayor and City Commission's waiver herein of the competitive bidding requirement, the Property Management Director, utilizing the resources of the Procurement Division, would institute an "expedited" bidding process to ensure the integrity of the process and, while not formal competitive bidding, a process that would still act to procure for the City the highest quality of goods and services at the least expense to the City, and endeavor to obtain as full and open competition, within that expedited framework, as possible; and

WHEREAS, additionally, the Administration would recommend that the Mayor and City Commission waive formal competitive bidding subject to the terms and conditions set forth below.

NOW, THEREFORE, BE IT RESOLVED BY THE MAYOR AND CITY COMMISSION OF THE CITY OF MIAMI BEACH, FLORIDA AS FOLLOWS:

1. The Mayor and City Commission hereby waive, by 5/7ths vote, the formal competitive bidding requirements, finding such waiver to be in the best interest of the City, relative to the City's (through its Property Management Director serving as the General Contractor) completion work relative to the ongoing repair and maintenance including, without limitation, the replacement of air conditioning systems, roof replacement, and pressure cleaning, waterproofing, and painting on the Miami City Ballet building, a City owned facility located at 2200 Liberty Avenue..

2. The City Manager, through his designee, who shall be the City's Property Management Director, is authorized to select, negotiate, and award all contracts, agreements, purchase orders, and change orders for the purchase of all necessary goods and services relative to the aforesated repair and maintenance projects.
3. All documents referenced herein shall be reviewed by the appropriate members of the Administration and City Attorney's Office prior to execution and shall contain, at a minimum, the following terms and conditions:
 - a) Time of completion of the work in question.
 - b) Fees, costs, and other charges to the City. All fees and costs negotiated should be competitive with fees and charges for similar work in the South Florida area.
 - c) Appropriate provisions addressing insurance requirements (naming the City as an additional insured), indemnification and hold harmless in favor of the City, and payment and performance bonds.
 - d) All scope of services and/or work required shall be prepared in conjunction with and reviewed by the Administration.
4. All contracts, agreements, purchase orders, and change orders over \$25,000 shall be executed by the Mayor and City Clerk, and shall be ratified by the Mayor and City Commission at its next available meeting.
5. The total amounts of contracts, agreements, purchase orders, and change orders to be executed pursuant to the approvals set forth herein shall not exceed the total appropriated amount of \$740,000, as set forth in this Resolution, without the prior approval of the Mayor and City Commission.
6. Notwithstanding the waiver of competitive bidding herein, the Property Management Director, utilizing the City's Procurement Division, shall use his best efforts through an "expedited" bidding process to assure that the highest quality of goods and services at the least expense to the City is obtained, and endeavor to obtain as full and open competition, as in said process, as possible.

PASSED AND ADOPTED THIS _____ day of _____, 2006.

Attest:

CITY CLERK

MAYOR

**APPROVED AS TO
FORM & LANGUAGE
& FOR EXECUTION**



City Attorney

3-3-06
Date

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DRAFT WI-FI AGREEMENT AND SCHEDULES

Attached hereto, are a draft Agreement and Schedules, as negotiated between the City of Miami Beach and IBM with respect to the RFP No. 36-04/05 For The Design, Deployment, and Management of a Citywide Wireless Network.

The Parties hereto represent that the Agreement and Schedules contain all material terms and conditions with respect to their negotiations. From the City's perspective, the Agreement must be submitted to the City Manager and the City Attorney for their approval.

The parties agree that they will, in good faith, work together to finalize the Agreement and each reserve mutually agreed editorial privileges. However, the parties agree that no change shall modify the substantial and material terms and conditions of the Agreement and Schedules.

Agenda Item R7D
Date 3-8-06

WIRELESS SYSTEM AND SERVICE AGREEMENT

This Agreement (the "Agreement") effective as of _____ day of _____, 2006, (the "Effective Date") is entered into between the City of Miami Beach, a Florida corporation, whose address is 1700 Convention Center Drive, Miami Beach, FL, 33139 (hereinafter referred to as the "City"), and International Business Machines Corporation, whose address is 1 Alhambra Plaza, Coral Gables, FL (hereinafter referred to as "Vendor" or "IBM"). City and Vendor may be hereinafter referred to individually as a "Party" or collectively as the "Parties."

- I. Definitions** - For the purpose of this Agreement the following words, terms and phrases shall have the meaning given herein. Words, terms and phrase not defined herein shall be given the meaning in each respective Schedule, or as customarily used in the industry.
- 1.1 Best-Effort Service** - a net throughput per subscriber of one (1) to five (5) megabit per second (Mbps) upstream (client device to Network) and downstream (Network to client device) transmission.
 - 1.2 Capacity** - The maximum number of simultaneous connections or the maximum amount of bandwidth at any one given point in time.
 - 1.3 City** - The City of Miami Beach, FL.
 - 1.4 Coverage Area** - The entire 7.1 square miles of the City of Miami Beach, including that portion of Fisher Island that is within the boundaries of Miami Beach.
 - 1.5 Encryption** - State of the Art security standards, which include the security for all critical Network Equipment and other components of the System via secured facilities.
 - 1.6 Equipment** - Any and all components, facilities, wiring, electronics and other materials utilized in the construction, activation, operation, management and monitoring of the System.
 - 1.7 Network** - All Equipment, Software, Firmware and Middleware including both wireless and wired components necessary to provide Service.
 - 1.8 Service** - High speed wireless access to the Internet via Vendor's Network from any point within the City including but not limited to seamless roaming subject to the 95% in-street (outdoor) coverage requirement.
 - 1.9 Software** - Software means any and all software, middleware, and firmware, both licensed by Vendor and Software that Vendor licenses from a third

party, and associated written and electronic documentation and data licensed in connection with the provision of Services under this Agreement.

- 1.10 State of the Art** – The most advanced, commercially available, Wireless Fidelity (WiFi) and Worldwide Interoperability for Microwave Access (WiMax) technology solutions related to levels of performance, Applications, Equipment, Software and components, based upon ratified standards issued by the Institute of Electrical and Electronic Engineers, Inc. (IEEE), to enhance existing or potential user applications for the City and/or the Network users taking in consideration performance, Capacity, signal coverage, reliability, features, maintenance, and efficiency of frequency use. State of the Art shall not include any technology or Equipment which is in Beta stage.
- 1.11 Street(s)** - means the surface, the air space above the surface and the area below the surface of any public Street, highway, road, boulevard, concourse, causeway, driveway, freeway, thoroughfare, parkway, sidewalk, bridge, tunnel, park, waterway, dock, bulkhead, wharf, pier, court, lane, path, alley, way, drive, circle, easement, or any other public right-of-way or public place, including public utility easements dedicated for compatible uses, or any other property in which the City holds any kind of property interest or over which the City exercises any type of lawful control, and any temporary or permanent fixtures or improvements located thereon, as may be ordinarily necessary and pertinent to construct and operate a Wireless Network.
- 1.12 Subscribers** - public users, including but not limited to residents, visitors and government users, who access the Network.
- 1.13 System** – the Network and Services, including all Equipment and Software, provided by Vendor pursuant to this Agreement.
- 1.14 Unlicensed Spectrum** - a frequency block that does not require a license from the FCC or equivalent governmental agency.
- 1.15 Vendor** – International Business Machines Corporation (“IBM”).
- 1.16 Wi-Fi** - Wi-Fi shall mean any wireless local area network (WLAN) products that are based on the Institute of Electrical and Electronics Engineers' (IEEE) 802.11 standards.
- 1.17 Wi-MAX** - broadband wireless Network that is based on the IEEE 802.16 standard, which ensures compatibility and interoperability between broadband wireless access Equipment.

- II. Scope of Agreement** - Vendor shall provide, operate and maintain for the City a Wi-Fi Network including but not limited to all design, construction, installation and maintenance of Equipment, Software and Services necessary to make available free

access to the Internet from any point within the City on a "Turnkey" basis as set forth herein and subject to the obligations of the City of Miami Beach. Schedule II sets forth the anticipated services and applications contemplated by the Parties to be provided by the WiFi Network (hereinafter defined as Services). The City Request For Proposals (RFP, Addendum No. 1, dated 8/10/05; Addendum No. 2, dated 8/24/05) and the IBM responses thereto; "IBM Response to RFP No. 36-04/05", dated 2/21/06) are hereby incorporated herein by reference (collectively referred to herein as the "RFP/Response") All provisions, terms and conditions contained in the RFP/Response shall represent the obligations of the Parties as if same were set forth herein unless expressly modified or amended herein. If there is a conflict between the RFP/Response and this Agreement, this Agreement prevails.

- III. Price and Terms of Payment** - In consideration of Vendor's performance of the Services, City shall permit Vendor to attach its Equipment to 260 mounting assets, including but not limited to poles and other facilities owned by the City as set forth in Schedule III, and shall pay Vendor for all Network elements and Services assigned to and rendered to the City pursuant to this Agreement as set forth in Schedule IIIa. Additionally, City may at its option purchase any one single or combination of all three optional additional items as set forth in Schedule IIIb. All taxes and similar assessments, levies and government-imposed obligations with respect to Vendor's income derived from its performance of Services hereunder shall be the obligation of and be paid by Vendor.
- IV. Term** - The initial term of this Agreement shall commence the date of execution of this Agreement by all Parties, the period of design, construction, installation and testing of the System and six (6) years from the Acceptance Date of the System as defined in Section V 1.4.2 herein unless otherwise terminated in accordance with this Agreement. The City, at its sole option and discretion, shall have the option to renew for two (2) terms of three (3) years each, with the consent of the Vendor ("Renewal Term"), unless otherwise terminated in accordance with this Agreement. Notwithstanding the foregoing, if the City terminates this Agreement prior to the expiration of the Initial Term or the Renewal Term and requests that Vendor to complete the Services then in progress under any Work Order, then the terms of this Agreement shall remain in full force and effect but only as applicable to any such Work Order and only until the completion of the Services under any such Work Order.
- V. Design, Construction, Installation, Maintenance and Performance**

- 1.1 System Design Methodology** – Vendor shall employ a methodical approach to Network design that centers around three progressively elaborated levels of granularity and detail. The Network architecture shall have the capability to evolve as the City's needs evolve thereby enabling the development of a progressively more detailed set of Network designs, each meeting the full set of functional requirements as set forth in Schedule V 1.1.

1.2 Architecture and Design Services – The Vendor’s wireless Network solution shall be designed based on a three-tiered approach. The top tier will consist of the applications management and support Services. This tier shall include but not be limited to Internet gateway, splash page and portal applications, OSS, customer and technical support Services, Network monitoring and management. The middle tier shall be a multi-tier backhaul Network consisting of both wired and wireless connectivity solutions operating in the unlicensed spectrum while the wired connectivity shall be operated by fiber. However, with the consent of the City, Vendor may substitute microwave facilities in lieu of fiber for any connectivity solutions. All wireless Network backhaul solutions shall additionally employ wired technologies such that the Network is at all times fully redundant and available. The third and bottom layer shall consist of the Wi-Fi Network Mesh for the Coverage Area. Schedule V 1.2 sets forth the required elements of architecture for the System as well as required Services for the System.

1.3 Network Infrastructure Requirements - the System shall consist of a wireless Network covering all 7.1 square miles of the City of Miami Beach.

1.4 Installation Services – Vendor shall provide turnkey installation Services required to the successful deployment of the System on a reasonably expedited commercially available basis. Schedule V 1.4 sets forth the specific installation requirements and time schedules. Time is of the essence for completion of the task set forth herein.

1.5 Telecommunications Connectivity Provisioning and Services – Schedule V 1.5 sets forth the telecommunication connectivity provisions and services necessary to accommodate the Network Capacity requirements for aggregation points for wired or wireless telecommunications services.

1.6 Network Monitoring and Management Services – Vendor shall be responsible for monitoring and managing the System, including but not limited to all Network Equipment, hardware, Software, tools, personnel and other components required to meet the reliability and performance goals of the City throughout the term of this Agreement as set forth in Schedule V 1.6, including, but not limited to, the following:

1.6.1 Performance Management - Measures and makes available various aspects of Network performance so that inter-Network performance can be maintained at an acceptable level.

1.6.2 Configuration Management - Monitor Network and System configuration information so that the effect of configuration changes (intentional or unintentional) can be tracked and managed.

1.6.3 Accounting Management - Measure Network-utilization parameters so that individual or group uses on the Network can be regulated appropriately. Such regulation should minimize Network problems and maximize the fairness of Network access across all domains and users.

1.6.4 Fault Management - Detect, log, notify support organizations and users (where appropriate) of, and (to the extent possible) automatically fix Network problems to keep the Network running effectively. This should include proactive determination of symptoms, isolation of problems and rapid resolution.

1.6.5 Security Management - Control access to Network and System resources according to defined policies, as set forth in writing by the City, so that the Network cannot be sabotaged (intentionally or unintentionally) and those without appropriate authorization cannot access sensitive information.

1.6.6 Remote Operations Center - Vendor shall utilize a remote operations center. Designated City Personnel shall at all times have unfettered access to all Network management software. The remote control system shall include deployment, provisioning, monitoring, managing and reporting functions. The specifications for the Remote Operations Center are set forth in Schedule V 1.6.7.

1.6.7 Reports - Vendor shall provide the City a written report regarding Network management , monitoring and maintenance on a quarterly basis or within ten (10) days of any City request for the same. Vendor shall additionally maintain all firmware, microcodes or middleware at no less than an in an n-1 status on a quarterly basis.

1.6.8 Vendor Representative - Vendor shall designate, in writing, an executive from the Vendor company who is the primary or single point of contact and provide the City with 24/7 contact information.

1.6.10 Additional Management – In addition, Vendor shall provide the following technical requirements:

- Support for event notifications
- Support for group management of System components
- Built-in configuration database
- Support for Simple Network Management Protocol ("SNMP") standards
- Graphical representation of Network data
- Support for configurable Access Control Lists ("ACLs")
- Ability to drill-down on System components
- Ability to auto discover new devices in the System
- Support for wireless proxy agents for non-SNMP devices
- Support for statistical reporting

1.7 Maintenance and Support Services. Vendor shall provide six (6) years of maintenance/support Services at no additional cost to the City. Vendor shall be responsible for all maintenance and support Services for all elements of the System, including but not limited to all Equipment and Software and any data transport Services that are required under the Agreement, and will be the single point of contact for maintenance, Service and support. Schedule V 1.7 sets forth the required plan and for maintenance of the System, which will include requirement for spare inventory. Additionally, Vendor warrants that: (i) there will be minimal interruption of Service during upgrades; (ii) backwards compatibility will be ensured for all existing applications, Services and Subscribers as upgrades occur.

1.8 Operations Support Systems (OSS) Services - Vendor shall provide tier-one support for hot zone technical support. Specific provisions are set forth in Schedule V 1.9.

1.9 Use of Streets, Government Owned Facilities and Rights of Way Permits, licenses and compliance with applicable rules and regulations of any government agency – Vendor shall be solely responsible for obtaining all necessary permits and licenses, and compliance with all applicable rules and regulations of any governmental agency, having jurisdiction over the rights-of-way, including but not limited to the Code of the City of Miami Beach.

1.9.1 Relocation Costs – responsible party The Vendor shall be responsible for all costs incurred for removal and relocation of any Network Equipment, including the cost of all permits and other approvals necessary for the work. Further, Vendor is responsible for restoring any damage to sidewalks, streets, curbs, landscaping, or other utilities or facilities resulting from removal and relocation of Equipment.

1.10 Prioritization of Access and In Motion Service – Vendor's Network shall ensure first right of access to government users. Vendor shall provide seamless, in-motion connectivity throughout the Coverage Area to government users. This includes the ability for Subscribers to maintain session-level persistence while the subscriber's device is in motion at speeds up to sixty (60) miles per hour. This capability must be supported with no interruption to applications running on the device. Vendor shall provide in motion service as provided in Schedule V 1.10.

VI. System Security – The System shall provide State of the Art security creating a means of authenticating users and a secure 802.1X or VPN method for securely connecting to the Network as set forth in Schedule VI. Vendor shall be responsible for the authorization and authentication security infrastructure for wireless government users up to and until the City's designated demarcation point as set forth in the design process in Schedule VI, Item 1. It is required by City that all installed

system hardware employing a Windows based operating system, be procured from Dell, as this is City standard. Vendors shall use best efforts to install any security or encryption patches or updates on an expedited basis, but in no event shall this period exceed forty-eight (48) hours from the release of any such update. These security standards shall include but not be limited to the Encryption standard protocols as set forth herein.

1.1 Encryption –Vendor shall design and provide State of the Art security and encryption solutions for the Network, particularly for City users, which includes but shall not be limited to the physical security for all critical Network Equipment and other components of the System via secured facilities. The Vendor agrees to provide solutions and support for the following as well as new security or encryption protocols as they become commercially available:

- Media Access Control ("MAC") address filtering
- Wired Equivalent Privacy ("WEP") Encryption, including both 64 and 128 bit keys
- Temporal Key Integrity Protocol ("TKIP") Encryption
- TAC & ACS Protocols
- Advanced Encryption Standard ("AES") Encryption
- Wi-Fi Protected Access ("WPA") & Wi-Fi Protected Access 2 Enterprise ("WPA2 Enterprise") Encryption
- 802.1x authentication using Extensible Authentication Protocol ("EAP") and "Remote Authentication Dial-In User Service" ("RADIUS")
- The suppression of Extended Service Set Identifier ("ESSID") broadcasts
- Multiple ESSIDs and the ability to map ESSIDs individually to Virtual LANs ("VLANs")
- Filtering of traffic based on Internet Protocol ("IP") addresses, subnets and Transmission Control Protocol ("TCP") ports
- Virtual Private Network ("VPN") tunneling
- Encryption of all control and Network management traffic transmitted within the System

1.2 Network filter – Vendor shall provide State of the Art Network security, capable of dynamically identifying possible security breaches, actively tracing the root thereof and immediately taking corrective action. Support for State of the Art Network traffic monitoring, analysis and reporting capable of capturing and analyzing all traffic transport over the System and decoding all major TCP/IP and application protocols in order to filter Network traffic to find specific information.

VII. Vendor Services Standards - Vendor warrants that it shall perform its Services in accordance with the highest standards of care and diligence practiced by telecommunications outsourcing professionals in performing Services of a similar nature. If, during the term of this Agreement or the renewal thereof it is shown that there is an error in the Services as a result of Vendor's failure to meet those standards, and City has notified Vendor in writing of any such error within thirty (30) days, Vendor shall perform such corrective Services within the original scope of Services

as may be necessary to remedy such error at Vendor's sole cost and expense. Vendor warrants it shall use its best efforts to ensure that all users receive continuous, uninterrupted Service.

VIII. Technical and Customer Support – Vendor shall provide technical and customer support for the System. Specific requirements are set forth in Schedule VIII.

IX. Training - (a) Vendor shall provide training for a minimum of two (2) weeks of informal training on the design and operation of the overall System for a minimum of four (4) City-designated persons prior to the activation of the System.

(b) Vendor shall provide a minimum of one (1) week of updated informal training on the design and operation of the overall System for a minimum of four (4) City-designated persons on an annual basis during the term of this Agreement.

X. Implementation and Activation Schedule – Vendor shall timely construct and implement the Network as more specifically set forth in Schedule X. Vendor is on notice that time is of the essence for compliance with this Agreement. It is the Parties' intent that the System be designed, implemented and made operational on an expedited basis.

XI. Inspection, Testing and Acceptance

1.1 **Conditional Acceptance** - (a) Vendor shall notify the City in writing when Vendor contends that all Work comprising a Milestone as set forth in the Schedule III is completed and ready for Conditional Acceptance by the City. Within thirty (30) days following receipt of Vendor's written notice, the City shall issue its written statement of Conditional Acceptance of the Milestone, or its written notice that the Work comprising the Milestone is not Conditionally Accepted. Conditional Acceptance will not be unreasonably withheld provided that all Work comprising the Milestone is completed and conforms to the Conditional Acceptance Standards.

1.1.1 In the event any Work comprising a Milestone is rejected by the City, the City shall, in its notice of rejection, specify in reasonable detail the reasons for the rejection including a description of the defects on which the rejection is based. Vendor shall, within five (5) business days following receipt of City's notice, deliver to the City its plan for correcting all defects identified in the City's notice. Upon the City's written approval of the plan of correction, Vendor shall proceed to correct the defective Work in accordance with the approved plan and shall complete all corrections within fifteen (15) calendar days following receipt of the City's approval of the

plan, or such longer period as the City may agree to in writing (the "First Correction Period"). Upon completion of the corrections, Vendor shall notify the City in writing of such completion. The City shall determine whether the corrected Work complies with the Conditional Acceptance Standards and issue its written notice of Conditional Acceptance or rejection of the corrected work to Vendor. If the Work is rejected a second time, Vendor shall again be required to correct the defects within five (5) days; and if the Work still does not comply with the Conditional Acceptance Standards, following the Second Correction Period, the City may, in its sole discretion, (i) request Vendor, in writing, to remove the rejected portion at Vendor's expense and to restore the System (and the premises, if applicable) to its condition prior to performance of the Milestone; and/or (ii) remove the rejected portion itself, at Vendor's expense, if Vendor does not comply with such request; and/or (iii) perform the rejected portions of the work itself, through its own personnel or third parties, at Vendor's expense.

1.1.2 The Conditional Acceptance Standards consist of the following:

- 1.1.2.1** The descriptions of functionality and standards of performance that are set forth in this Agreement that apply to the Milestone;
- 1.1.2.2** The manufacturer's (including, without limitation, Vendor's, where applicable) most current published specifications for the Software, Equipment, and Deliverables that apply to the Milestone
- 1.1.2.3** System designs, as accepted and approved by the City;
- 1.1.2.4** The test criteria and standards of performance provided in the Test Plan(s) as defined in Section ____ that are accepted and approved by the City and apply to the Milestone; and
- 1.1.2.5** Successful completion of the Conditional Acceptance Tests and the Reliability Period as provided in Section ____

1.2 **Final Acceptance** - Vendor shall notify the City in writing when Vendor contends that all requirements for the System are completed and that the System and all other components have been fully performed in accordance with the Agreement, including, without limitation, the Final Acceptance Standards as set forth herein, and the system is ready for Final Acceptance Test(s). Following receipt of such notice, the City shall establish a schedule for commencing and conducting the Final Acceptance Test(s); the commencement date shall be not more than thirty (30) calendar days following the date on which the City receives Vendor's notice, except as

may be otherwise agreed to by the Parties. The System shall not be Finally Accepted unless and until the System and all other components of the System function together as an integrated whole in accordance with the Final Acceptance Standards.

1.2.1 The Final Acceptance Standards consist of the following:

- 1.2.1.1 The descriptions of functionality and performance and all standards of performance that are set forth in this Agreement
 - 1.2.1.2 The Documentation
 - 1.2.1.3 The manufacturer's (including, without limitation, Vendor's where applicable) most current published specifications for all Software and Deliverables;
 - 1.2.1.4 All design documents prepared by Vendor under this Agreement, including, without limitation, the Preliminary Design and Detailed Design;
 - 1.2.1.5 The test criteria and standards of performance set forth in the Test Plan(s), as accepted and approved by the City; and
 - 1.2.1.6 Successful completion of the Final Acceptance Tests and the Reliability Period provided in Section
-

1.3 Acceptance Test(s); Test Plan(s) - The Services and Deliverables comprising each Milestone in the Schedule III shall be subject to conditional acceptance testing as approved and accepted by the City (the "Conditional Acceptance Tests"), and the Services and Deliverables as an integrated system shall be subject to final acceptance testing as approved and accepted by the City (the "Final Acceptance Tests"). No Conditional or Final Acceptance Test or other test of the Services and Deliverables shall commence unless and until Vendor has delivered and the City has accepted and approved, in writing, Vendor's written plan or plans setting forth, for the Conditional Acceptance Test(s) and the Final Acceptance Test(s), a test method and criteria and standards of performance that must be satisfied for the test to be successful (collectively, the "Test Plan(s)" that are acceptable to the City). The Test Plan(s) shall include, without limitation, test methods and criteria and standards of performance for all Project Milestones identified in Schedule III, and otherwise conform to the general test requirements; and shall fully test the System for conformance to the terms and conditions of the Agreement and other Final Acceptance Standards. The Test Plan(s) shall be Deliverables under the Agreement.

1.4 Reliability Period - (a) FOR CONDITIONAL ACCEPTANCE: The System elements of Milestones to be Conditionally Accepted must function in conformance with the Conditional Acceptance Standards and without any Material Defect or Material Failure for a period of ninety (90)

consecutive calendar days, commencing on the day following the first successful completion of the Conditional Acceptance Test. In the event any System element or work comprising a Milestone suffers any Material Defect or Material Failure prior to the expiration of such period (the "Reliability Period"), Vendor shall remedy such Material Defect, and a new ninety (90) consecutive calendar day Reliability Period (the "Second Reliability Period") shall begin on the day that Vendor notifies the City that the remedy has been completed. In the event System element or work comprising a Milestone does not successfully complete the Second Reliability Period without any Material Defect, the City may, at its sole discretion, terminate this Agreement and exercise any remedy provided therein.

1.4.1 (b) FOR FINAL ACCEPTANCE: It shall be a condition of Final Acceptance that the completed and fully integrated System function in conformance with the Final Acceptance Standards and without any Material Defect for a period of one hundred and eighty (180) consecutive calendar days, commencing on the day following the first successful completion of the Final Acceptance Test. In the event the System suffers any Material Defect or Material Failure prior to the expiration of such period (the "Reliability Period"), Vendor shall remedy such Material Defect Failure, and a new one hundred and eighty (180) consecutive calendar day Reliability Period (the "Second Reliability Period") shall begin on the day that Vendor notifies the City that the remedy has been completed. In the event the System does not successfully complete the Second Reliability Period without any Material Defect, the City may, at its sole discretion, terminate the Agreement for default and exercise any one or more of the remedies provided to the City in Section ____ (Termination).

1.5 Acceptance or Rejection- If the System is not in compliance, the City may, in its sole discretion, (a) reject the System and this Agreement shall be terminated with all costs and fees to be paid by the Vendor within thirty (30) days of receipt of the Notice of Rejection or the City shall have the right to exercise its rights under the Construction Letters of Credit pursuant to Section XXVII 1.5, or in the City's sole discretion (b) allow the Vendor additional time to come into compliance. If the City determines that the System is in compliance, then the City shall accept the System.

1.6 Acceptance Certificate and Transfer of Title - Upon the successful completion of the applicable Acceptance Tests, Vendor shall submit to City an Acceptance Certificate. Therein, the Certificate shall certify the test results and state that the Equipment and Software is installed and operating in accordance with the

requirements of this Agreement. Vendor shall then transfer Title and ownership of all components of the System to the City.

1.6.1 Acceptance Certificates shall apply to each item of Equipment and Software delivered and installed pursuant to this Agreement. City shall sign the Acceptance Certificate upon successful completion of the applicable Acceptance Tests, acknowledging that the Equipment, Software and the System, to that stage completed, have been installed in accordance with the requirements of this Agreement and the Specifications, and return the Acceptance Certificate to Vendor.

1.6.2 The date on which the City signs the Acceptance Certificate shall be the Acceptance Date of the System. Upon delivery of such Acceptance Certificate to Vendor, "Acceptance" (or in its verb form "Accepted"), as used herein, shall be deemed to have taken place.

XII. Ownership and Title to Equipment

1.1 Title to be held by the City - Upon written acceptance of the System pursuant to Sec. XI, title to all components of the System including but not limited to, Equipment and Software installed pursuant to this Agreement shall be exclusively held by the City, free and clear of all liens and encumbrances. All warranties, guarantees and licenses associated with any Equipment or Software used in connection with the System shall be assigned to the City.

XIII. Upgrade and State of the Art System - Vendor shall maintain a State of the Art System as defined in Section I, 1.10 herein during the term of the Agreement to mitigate the risks of obsolescence in the system or its performance. It is Parties' intent to maintain the system as the best of the best citywide wireless network. Vendor shall provide to the City, at minimum, on an annual basis, a written report setting forth the then current State of the Art for wireless Networks and Services including but not limited to: (a) requirements to upgrade the System to enhance the existing level of Services and applications; and (b) to provide any new wireless Services or new products commercially available. Based upon the findings of the report, Vendor shall simultaneously submit an upgrade plan to the City which shall include a description of new Software, Equipment and Services the Vendor shall provide and the timing for implementation of the new Software, Services and Equipment on a commercially reasonable expedited schedule. The Parties contemplate that one complete replacement of the network infrastructure shall be provided during the term of this Agreement. Vendor's upgrade plan shall take into consideration backwards compatibility, which must be provided for existing applications, services and subscribers as upgrades occur. All upgrades shall minimize any interruption of Services. In addition, Vendor must submit a support plan for installing new nodes on an as needed basis to support additional capacity requirements, as needed. Vendor's upgrade plan shall also take into consideration the need for continuity with existing equipment. The Vendor's upgrade plan is subject to review and written approval by

the City. The Parties anticipate that upgrades, including WiMax, under consideration by the industry, as set forth in Schedule XIII, will be deployed by Vendor on an expedited basis when commercially available. The City shall not be liable for any costs related to upgrading the System, equipment and Services.

XIV. Warranties - Vendor shall warrant the entire Wireless Miami Beach System and all work that is provided under the Agreement, including, without limitation: all software, equipment, cabling, and other deliverables; network design and other designs and studies furnished and/or used in the implementation of the System; and implementation/integration services, construction services, and any other services required under the Agreement. The warranty guarantees that the System will conform to all technical specifications, performance standards, and designs for the System that are incorporated in the Agreement and/or furnished as deliverable under the contract. The Vendor is responsible for all warranty obligations and is the single point of contact for service under the warranty. The warranty period shall be for two (2) years, commencing upon Final Acceptance of the System of by the City. In the event that City determines there is a breach of the above referenced specifications or identifies any defects in material or workmanship, Vendor shall, on a commercially expedited basis, replace said Equipment. Vendor warrants that it holds a good and valid license for all software delivered or installed under this Agreement.

XV. Insurance - Vendor shall obtain, provide and maintain during the term of the Agreement the following types and amounts of insurance which shall be maintained with insurers licensed to sell insurance in the State of Florida and have a B+ VI or higher rating in the latest edition of AM Best's Insurance Guide published by A.M. Best Company, Oldwick, New Jersey, or its equivalent, subject to the approval of the City's Risk Manager. These policies cannot be canceled, modified, terminated or reduced in coverage without thirty (30) days prior written notice to the City. The Vendor shall not commence any work pursuant to this Agreement until all insurance required under this Section has been obtained and such insurance has been approved by the City's Risk Manager. The insurance must be furnished by insurance companies authorized to do business in the State of Florida and approved by the City's Risk Manager. Original certificates of insurance for the above coverage must be submitted to the City's Risk Manager for approval prior to any work commencing. These certificates will be kept on file in the office of the Risk Manager, 3rd Floor, City Hall. The Vendor is solely responsible for obtaining and submitting all insurance certificates for its sub-Vendors. Compliance with the foregoing requirements shall not relieve the Vendor of the liabilities and obligations under this Section or under any other portion of this Agreement, and the City shall have the right to obtain from the Vendor specimen copies of the insurance policies in the event that submitted certificates of insurance are inadequate to ascertain compliance with required coverage. Any exceptions to these requirements must be approved by the City's Risk Management Department.

- 1.1 Commercial General Liability** - A policy including, but not limited to, comprehensive general liability including bodily injury, personal injury, property damage in the amount of a combined single limit of not less than \$1,000,000. Coverage shall be provided on an occurrence basis. The City of Miami Beach shall be named as certificate holder and additional insured on policy.
- 1.2 Worker's Compensation Insurance & Employer's Liability** - A policy of Worker's Compensation and Employers Liability Insurance in accordance with State worker's compensation laws as required per Florida Statutes. Said policies of insurance shall be primary to and contributing with any other insurance maintained by Vendor or City, and shall name the City and the officers, agents and employees of said organization as additional insured while acting within the scope of their duties but only as to work performed by the Vendor under this Agreement.
- 1.3 Automobile Liability** - A policy including, but not limited to, automobile liability including bodily injury, personal injury, property damage in the amount of a combined single limit of not less than \$1,000,000. Coverage shall be provided on an occurrence basis. The City of Miami Beach shall be named as certificate holder and additional insured on policy.
- 1.4 Windstorm Coverage** - A policy covering the network's system and equipment from windstorm damage.

XVI. Indemnification - Vendor agrees to indemnify and hold harmless the City of Miami Beach and its officers, employees and agents, from and against any and all actions, claims, liabilities, losses, and expenses, including, but not limited to, attorneys' fees, for personal, or bodily injury, wrongful death, loss of or damage to property, at law or in equity, which may arise or be alleged to have arisen from the negligent acts, errors, omissions or other wrongful conduct of the Vendor, its employees, agents, sub-Vendors, or any other person or entity acting under Vendor's control, in connection with the Vendor's performance of the Services pursuant to this Agreement; and to that extent, the Vendor shall pay all such claims and losses and shall pay all such costs and judgments which may issue from any lawsuit arising from such claims and losses, and shall pay all costs and attorneys' fees expended by the City in the defense of such claims and losses, including appeals. The parties agree that one percent (1%) of the total compensation to the Vendor for performance of the Services under this Agreement is the specific consideration from the City to the Vendor for the Vendor's Indemnity Agreement. The Vendor's obligation under this Subsection shall not include the obligation to indemnify the City of Miami Beach and its officers, employees and agents, from and against any actions or claims which arise or are alleged to have arisen from negligent acts or omissions or other wrongful conduct of the City and its officers, employees and agents. The parties each agree to give the other party prompt notice of any claim coming to its knowledge that in any way directly or indirectly affects the other party.

XVII. Public Entity Crimes - A State of Florida Form PUR 7068, Sworn Statement under Section 287.133(3)(a) Florida Statute on Public Entity Crimes shall be filed with the City's Procurement Division, prior to commencement of the Services herein.

XVIII. Conflicts of Interest - The Vendor agrees to adhere to and be governed by the Metropolitan Miami-Dade County Conflict of Interest Ordinance (No. 72-82), as amended; and by the City of Miami Beach Charter and Code, which are incorporated by reference herein as if fully set forth herein, in connection with the Agreement conditions hereunder. The Vendor covenants that it presently has no interest and shall not acquire any interest, direct or indirectly which should conflict in any manner or degree with the performance of the Services. The Vendor further covenants that in the performance of this Agreement, no person having any such interest shall knowingly be employed by the Vendor. No member of or delegate to the Congress of the United States shall be admitted to any share or part of this Agreement or to any benefits arising therefrom.

XIX. Intellectual Property - The Parties will work to come to an agreement to resolve any Intellectual Property issues prior to the execution of this Agreement.

XX. Notices - All notices and communications in writing required or permitted hereunder may be delivered personally to the representatives of the Vendor and the City listed below or may be mailed by registered mail, postage prepaid (or airmailed if addressed to an address outside of the city of dispatch).

Until changed by notice in writing, all such notices and communications shall be addressed as follows:

TO VENDOR:

TO CITY:

Notices delivered hereunder shall be effective:

If delivered personally, on delivery; if mailed to an address in the city of dispatch, on the day following the date mailed; and if mailed to an address outside the city of dispatch on the seventh day following the date mailed.

XXI. Limitation of Liability -

- 1.1 City** - The City desires to enter into this Agreement only if in so doing the City can place a limit on the City's liability for any cause of action for money damages due to an alleged breach by the City of this Agreement, so that its liability for any such breach never exceeds the sum of Agreement Price less any sum paid by the City prior to the breach (unless the City has drawn down upon the Construction Letters of Credit). Vendor hereby expresses its willingness to enter into this Agreement with Vendor's recovery from the City for any damage action for breach of contract to be

limited to a maximum amount of Agreement Price less any sum paid by the City prior to the breach (unless the City has drawn down upon the Construction Letters of Credit). Accordingly, and notwithstanding any other term or condition of this Agreement, Vendor hereby agrees that the City shall not be liable to the Vendor for actual direct damages in an amount in excess of the Agreement Price less any sum paid by the City prior to the breach (unless the City has drawn down upon the Construction Letters of Credit) but in no circumstances shall the City be liable to the Vendor loss of or damage to data, special, incidental, or indirect damages, or for any consequential damages, for lost profits, business, revenue, goodwill or anticipated savings, or for any action or claim for breach of contract arising out of the performance or non-performance of any obligations imposed upon the City by this Agreement. Nothing contained in this paragraph or elsewhere in this Agreement is in any way intended to be a waiver of the limitation placed upon the City's liability as set forth in Section 768.28, Florida Statutes.

- 1.2 IBM** - The Vendor desires to enter into this Agreement only if in so doing the Vendor can place a limit on the Vendor's liability for any cause of action for money damages due to an alleged breach by the Vendor of this Agreement, so that its liability for any such breach never exceeds the sum of Agreement Price. Vendor hereby expresses its willingness to enter into this Agreement with Vendor's recovery from the City for any damage action for breach of contract to be limited to a maximum amount of the Agreement Price. Accordingly, and notwithstanding any other term or condition of this Agreement, City hereby agrees that the Vendor shall not be liable to the City for actual direct damages in an amount in excess of the Agreement Price, but in no circumstances shall the Vendor be liable to the City loss of or damage to data, special, incidental, or indirect damages, or for any consequential damages, for lost profits, business, revenue, goodwill or anticipated savings, or for any action or claim for breach of contract arising out of the performance or non-performance of any obligations imposed upon the Vendor by this Agreement.
- 1.3** Notwithstanding the above, the limitation of liability of the Agreement price as set forth above shall not apply for either Party to violations of intellectual property rights and damages, for bodily injury (including death) or damage to real and tangible personal property.

XXII. Independent Vendor Relationship - Vendor shall install the System and perform the Services required under this Agreement as an independent Contractor. Vendor shall not be considered an employee or agent of the City nor shall Vendor acquire any property interest in any pole or other facility to which Equipment connected with the System is attached. Nothing herein, shall be construed to create a joint venture between Vendor and the City.

XXIII. Subcontracting Prohibited – Vendor is prohibited from subcontracting this Agreement or any part thereof unless such subcontracting is first approved by the

City in writing. A list of pre-approved sub-contractors is attached hereto as Schedule XXIII. Neither party shall, on the basis of this Agreement, contract on behalf of or in the name of the other party. Any contract made in violation of this provision shall confer no rights on any party and shall be null and void in its entirety.

XXIV. Agreement User Access Fee - All entities, approved by the City, are eligible to receive or utilize the City's Agreement and terms and conditions, except for, pricing or the Additional Public Benefits. The City shall have no liability to Vendor for the cost of any purchase made by an ordering entity and shall not be deemed to be a party thereto. Vendor shall pay to the City, on a monthly basis, 1% of the total dollar amount of all sales to governmental, not-for-profit or quasi-governmental entities, resulting from this Agreement and/or utilization of the City's Agreement, pricing, or terms and conditions. Vendor will provide to the City specification of solution and elements to be made available subject to this Section.

XXV. Successors and Assigns - The Vendor shall not assign, sublet, convey or transfer its interest, in whole or in part, this Agreement without City's prior written consent. Nothing herein shall be construed as creating any personal liability on the part of any official, employee or agent of the City which may be a party hereto, nor shall it be construed as giving any rights or benefits hereunder to anyone other than the City and the Vendor. Any unauthorized assignment shall constitute default by the Vendor.

XXVI. Applicable Law; Venue - Vendor and City are subject to and agrees to comply with all generally applicable local, City, state and Federal laws, ordinances, rules, regulations and orders, existing or hereafter lawfully adopted. This Agreement shall be governed by the Laws of the State of Florida. Venue for any action arising out of the performance of this Agreement shall lie in any court of competent jurisdiction in Miami-Dade County. BY ENTERING INTO THIS AGREEMENT, THE VENDOR AND CITY EXPRESSLY WAIVE ANY RIGHTS EITHER PARTY MAY HAVE TO A TRIAL BY JURY OF ANY CIVIL LITIGATION RELATED TO, OR ARISING OUT OF, THIS AGREEMENT.

XXVII. Termination and Liquidated Damages

1.1 Termination by Default

1.1.1 Termination for Default by Vendor - If, through any cause within the reasonable control of the Vendor, Vendor shall fail to fulfill in a timely manner, or otherwise violate any of the covenants, Agreements, or stipulations material to the Agreement, the City shall thereupon have the right to terminate the Services then remaining to be performed by giving written notice to the Vendor of such termination and Vendor fails to cure such default after a period of thirty (30) days from receipt by the Vendor of the written termination notice. However, the cure period for any

security or encryption patch update, as set forth in Section VI above, shall be twenty-four (24) hours. In addition, no additional cure period shall apply for Final Acceptance. In that event, the City shall compensate the Vendor in accordance with the Agreement for all Services performed by Vendor prior to termination, net of any costs incurred by the City as a consequence of the default. Notwithstanding the above, Vendor shall not be relieved of liability to the City for damages sustained by the City by virtue of any breach of the Agreement by Vendor and the City may reasonably withhold payments to the Vendor for the purposes of set off until such time as the exact amount of damages due the City from Vendor is determined.

1.1.2 Termination for Default by City - If, though any cause within the reasonable control of the City, City shall fail to fulfill in a timely manner, or otherwise violate any of the covenants, Agreements, or stipulations material to the Agreement, the Vendor shall thereupon have the right to terminate the Agreement by giving written notice to the City of such termination and City fails to cure such default after a period of thirty (30) days from receipt by the City of the written termination notice. Notwithstanding the above, City shall not be relieved of liability to the Vendor for damages sustained by the Vendor by virtue of any breach of the Agreement by City.

1.2 Termination for Convenience - The City may, for its convenience, terminate the Services then remaining to be performed at any time without cause by giving written notice to Vendor of such termination, which shall become effective thirty (30) days following receipt by Vendor of such notice. In that event, all finished or unfinished documents and other materials shall be properly delivered to the City. If the Agreement is terminated by the City as provided in this section, the City shall compensate the Vendor in accordance with this Agreement for all Services actually performed by the Vendor and reasonable direct costs of Vendor for assembling and delivering to City all documents. No compensation shall be due to the Vendor for any profits that the Vendor expected to earn on the balanced of the Agreement. Such payments shall be the total extent of the City's liability to the Vendor upon a termination as provided for in this section.

1.3 Liquidated Damages for Construction Delay, Non-Delivery - The Vendor shall pay liquidated damages in the event (i) principal Milestones and/or the entire System are not delivered by the dates provided in this Agreement ; (ii) the System is not delivered at all, or is delivered in a manner inconsistent with Agreement requirements; (iii) the System suffers a total or partial failure that deprives Wireless Miami Beach customers of Service; (iv) the Service or the System or any component thereof is not in compliance with any requirement of this Agreement during the term of this Agreement and any renewal thereof. The specific amounts of liquidated damages will vary with the specific condition and are subject to negotiation, but shall be

sufficient, at a minimum, to cover the cost of financing the System, in the event of non-delivery; the cost of debt Service; and the cost of remedial measures by the City in the case of partial to total System failure. Schedule XXVII 1.3 sets forth liquidated damages agreed to by the parties.

1.4 Letter of Credit – The Vendor shall provide the City within fifteen (15) calendar days of the execution of the Agreement, a Letter of Credit, from an issuing bank located in Miami-Dade County, FL approved by the City, containing all the provisions of Schedule XXVII 1.4, attached hereto, entitled "Letter of Credit". The Letter of Credit shall be in the amount of \$250,000 as a guarantee to the City of the completion and performance of the work, as well as full payment of all suppliers, laborers, or subcontractors employed pursuant to this Agreement. In the event of a breach of this Agreement or any act of non-compliance by Vendor, the City shall have the right to draw down from the Letter of Credit the estimated cost of remedying the act of breach or non-compliance. The City may execute such draw down ten (10) days after it has given notice to Vendor to cure the breach or act of non-compliance and Vendor has failed to cure same or to provide the City with a plan to cure that is acceptable to the City. The Letter of Credit may be reduced or cancelled one hundred eighty (180) days after the expiration or termination date of this Agreement and receipt by the City of releases from Vendor in connection with any payments due suppliers and provided that any amount in dispute between the parties remains or is replaced by a cash security deposit.

1.5 Construction Letters of Credit - The Vendor shall provide the City within three (3) calendar days of receipt of each payment from the City of any Capital Payment made pursuant to Schedule III, a Letter of Credit, from an issuing bank located in Miami-Dade County, FL approved by the City, containing all the provisions of Schedule XXVII 1.5, attached hereto, entitled "Construction Letter of Credit". The Letter of Credit shall be an amount equal to the amount of each payment made by city as a guarantee to the City of the completion and performance of the work, as well as full payment of all suppliers, laborers, or subcontractors employed pursuant to this Agreement. In the event Vendor breaches its obligation by failing to meet the Final Acceptance Standard after notice and opportunity to cure as set forth in Section ____, the City shall have the right to draw down the Letters of Credit. The City may execute such draw down ten (10) days after it has given notice to Vendor to cure the breach or act of non-compliance and Vendor has failed to cure same or to provide the City with a plan to cure that is acceptable to the City. The Construction Letter(s) of Credit shall terminate upon Final Acceptance of the System by the city, pursuant to Section IX.

XXVIII. Public Benefits - The Vendor shall provide the public benefits related to the System as set forth in Schedule XXVIII. Notwithstanding anything to the contrary, this provision is not subject to the Additional User Access Fee.

XXIX. City Obligations - The City shall be required to provide Vendor City assets and personnel as set forth in Schedule XXIX to assist in the installation, operation, maintenance and upgrade of the System.

XXX. Most Favored Nations – Technology, Services and Costs – If, after this Agreement is entered into, Vendor enters into an Agreement, with another municipality, city or local government for the provision of Wi-Fi or WiMax Services, technology or Equipment that provide comparable or better services as measured by such metrics as intended purpose, throughput, spectrum, technology, application provisioning, size, configuration, user density, as reasonably determined by the City, the City shall have the right to amend this Agreement to include rights, obligations and benefits substantially similar to those contained in such other agreement.

XXXI. Severability - If any court of competent jurisdiction orders the City, or finds a provision in the Agreement is illegal, the Parties agree to delete that provision and to modify the Agreement as necessary.

XXXII. Force Majeure - Vendor nor City shall not be considered in default by reason of any failure in performance, if such failure arises out of causes reasonably beyond the control of the Parties. Such causes include fire, flood, earthquake, elements of nature, acts of war, terrorism, riots, civil disorders, rebellions or revolutions, strikes, lockouts, labor difficulties, acts of God, natural or public health emergencies, labor disputes, and abnormally severe and unusual weather conditions.

XXXIII. Entirety of Agreement - Entirety of Agreement - This Agreement and the attached Schedules constitute the complete basis for the Agreement. In the event of a conflict between the terms of this Agreement and the terms of any Schedule, the terms of the Agreement shall control. No other representations of any kind, oral or otherwise, have been made.

XXIV. Reservation of Rights - Nothing herein shall be deemed a waiver of the City's right to provide any form of communications or telecommunications services or to own, lease or operate a System consistent with applicable federal and state law. Further, nothing herein shall be construed to limit the City's lawful right to grant non-party entities access to the City's Streets, Rights of Ways and facilities including but not limited to poles consistent with applicable law, rules, regulations and technical standards.

IN WITNESS WHEREOF, the Parties have executed this Agreement as of the Effective Date.

CITY OF MIAMI BEACH

**INTERNATIONAL BUSINESS
MACHINES CORPORATION**

By: _____

By: _____

Name: _____

Title: _____

Date: _____

Address: 1700 Convention Center Drive
Miami Beach, FL 33139

Name: _____

Title: _____

Date: _____

Address: 1 Alhambra Plaza
Coral Gables, FL

SCHEDULE II

ANTICIPATED SERVICES AND APPLICATIONS

1. Network Infrastructure Procurement

Description: To order, procure and manage the delivery of the City of Miami Beach Wireless network infrastructure components as listed in Attachment xx.

The Major Sub task are:

1. Receive acceptable City of Miami Beach notice to proceed to purchase specific products.
1. Procure the products listed in Attachment xx coinciding with the deployment schedule.
1. Receive the City of Miami Beach Project Manager's delivery confirmation

Task Assumptions:

1. Changes or additions to the procured products as listed in Attachment 1 as a result of change in requirements, environmental conditions or other activities will be provided through the Project Change Control Procedure.
1. The City of Miami Beach will supply a receiving facility for the procured hardware to be delivered to.

Completion Criteria: This task will be complete when IBM has verified the delivery of the value of hardware and software products listed in Attachment 1 and specified under "Charges" or any subsequent Change Authorization.

2. Architecture and Design Services

2.1 Task City of Miami Beach Wireless Network Design

In progress

2.2 Engineering Design - Site Survey

Description: Develop and document the detailed site survey for the backhaul, multipoint and WiFi mesh for the 7 square mile City of Miami Beach coverage area.

The major subtasks are to:

1. Overall Wireless System Survey Planning
 - Collection of all information from City recording all available facilities, connected to network and areas to be covered
 - Tower, streetlight and building mapping for the area

- Pre survey design of solution and review with the City of Miami Beach
- Coordination of survey project schedule with the City of Miami Beach

2. On Site Survey for Backhaul and Multipoint

- Onsite Survey of each location for LOS to second location or tower
 - Tower climbing to guarantee LOS where required
 - Bucket Truck where required
- Spectrum Analysis as required
- Digital pictures of all site details
- Identification of mounting requirements, and review with City of Miami Beach Facilities or Public Works management
- Identification of cable runs for power, grounding, RF and network connections
- Site grounding upgrade requirements
- Recommendations for structural analysis if needed

3. WiFi Mesh Planning Survey

- Perform Detailed Site Survey for WIFI via onsite Survey of each location for line of site to other mesh and gateway locations
- WiFi Hot Spot Prioritization
- Spectrum Analysis (if needed)
- Produce Coverage Reports
- Digital pictures of all site details
- Identification of mounting requirements, and review with facilities manager if possible
- Identification of power, grounding, RF and network connections

4. Design Review and Acceptance

- Presentation of site design and build plan
- Conduct 2 follow up design review/acceptance meetings

Completion Criteria: This task will be considered complete when the “City of Miami Beach Wireless Coverage Physical Network Specifications” document package is submitted to the City of Miami Beach Project Manager.

Deliverable: City of Miami Beach Wireless Coverage Physical Network Specifications

Purpose: IBM will provide a document with the details of the Wireless Network infrastructure physical engineering specifications for City of Miami Beach consideration

Delivery: One hard copy and one soft copy (CD) in PDF format will be delivered to the City of Miami Beach Project Manager.

Content: The report will consist of the following, as appropriate:
Delivered Site Survey Report:

1. Full report submission with pictures identifying each site build plan

1. Report of all gathered information on site location
1. Overall maps and summary of proposed network
1. Engineering Path Analysis between sites
1. WiFi Coverage Maps

3. Installation Services

3.1 Site Acquisition

Description: Assist the City of Miami Beach with lease negotiations for installation of Backhaul equipment for the City of Miami Beach coverage area.

Site Acquisition

- It is the intent of the parties to use City assets i.e. existing poles and city owned and controlled roof-tops for the System facilities. In the event additional sites are required, the Parties agree to evaluate the following additional site options in priority order:
 1. Minimal installation of new city poles
 1. County or FP&L poles already in place
 1. Non-city owned or controlled roof-tops
 1. Additional new city poles
- IBM will assist in Lease Negotiations for Backhaul buildings with an allowance of up to 80 hours of project site acquisition support. This can include:
 - Assistance in preparation of lease/option exhibits for tower/building leases
 - Permission for preliminary site surveys, inspections, site visits
 - Review agreements to ensure compliance with special conditions pertaining to technical installation
 - Assist in negotiation of final lease agreements.

Completion Criteria: This task will be considered complete when the City of Miami Beach obtains agreements for use of backhaul buildings.

Deliverable: None

3.2 FCC Licensing

Description: Obtain appropriate FCC licenses for the City of Miami Beach wireless network.

FCC Licensing

- IBM will obtain 4 Government owned FCC licenses for 6, 11, 18, or 23 GHz radios.

- IBM will collect license owner data from customer and necessary information for completion of forms
- IBM will complete and send all path engineering forms to FCC Frequency Coordinator
- IBM will perform search for Frequency availability
- IBM will receive City of Miami Beach Approval Notice (CAN) of License from FCC and send to Customer for approval
- Customer must sign and return CAN for final approval
- IBM will forward final licenses to customer
- IBM will complete FCC database filings after installation

Completion Criteria: This task will be considered complete when IBM provides the City of Miami Beach project manager FCC licenses.

Deliverable: Required FCC licenses

Purpose: Allow the City of Miami Beach to be in compliance with FCC requirements regarding the installed wireless network

Delivery: One hard copy set of final licenses delivered to the City of Miami Beach Project Manager.

Content: FCC license document

3.3 City of Miami Beach Wireless Network Installation

Description: Install the backhaul, multipoint and WiFi mesh for the 7 square mile City of Miami Beach coverage area.

Installation

Licensed Backbone Links:

Install four licensed links for the core backbone for the city wide wireless network;

- Install Three links of Licensed 18 Ghz :
 - (6) 18GHz split design 200Mbps Licensed Radio
 - (6) 4ft 18GHz direct connect dish
 - (6) Pole mount or mounts for the dishes: Exact specifications and numbers will be determined upon completion of the site survey.
 - All mounts will have increased strength mounting materials.
 - Install 50" NEMA 4 enclosures with fans and air option
 - Install Outdoor rated coax and route to enclosures that are described in the bill of materials.
 - Ground all equipment
 - Install lightning protection

- Weatherproof all outdoor connections.
- Install layer 3 switches at the four backhaul locations
- Turn up and test backhaul links
- Install from North to South a 11 Ghz link;
 - (2) 11GHz split design 100Mbps Licensed Radio
 - (2) 4ft 11GHz direct connect dish
 - (2) Pole mount: Exact specifications will be determined upon completion of the site survey
 - Install Outdoor rated coax and route to enclosures that are described in the bill of materials.
 - Ground all equipment
 - Install lightning protection
 - Weatherproof all outdoor connections.
 - Turn up and test backhaul links

B28 Link:

5.3Ghz Link to South Beach Backhaul Point (Southern Beach Area Coverage - Govt Cut)

- (2, one each site) Install radios 5.3 GHz B28 Links to Buildings listed above.
- (2, one each site) Install outdoor CAT5 cable to accommodate each of the access units,
- Install (2) panel antennas to achieve a point to point connection
- Pole mount or mounts for the panel antennas: Exact specifications and numbers will be determined upon completion of the site survey.
- Install lightning protection and ground cable if needed.
- Weatherproof all connections
- (1, far end) Install 50" NEMA 4 enclosures with fans and air option
- Install layer 3 switch at far end
- Turn up and test link

Multi Point Backhaul Links:

5.8GHz Multipoint Access units will be installed at the 4 distribution points of the back haul network plus the South Beach distribution area, each providing 360 degrees of coverage:

- Install base Station Chassis w/ Redundant PS
- Install 5.8Ghz Base Station Card with 120 Degree

- Install three runs of outdoor CAT5 cable to accommodate each of the access units,
- Install (3) sector antennas to tower to achieve 360 deg coverage
- Install lightning protection and ground cable if needed.
- Install increased Strength Mounting Materials
- Weatherproof all connections
- All mounts will be determined upon completion of the site survey
- Connect to layer three switch that will be installed with Back haul links
- Turn up and test link

City-wide Hot Spot Build

Multi Point Subscriber Units:

Install 50 Subscriber units which will connect WiFi Gateways back to the multipoint equipment at the main back haul distribution points. Installation at each location will consist of the following:

- Installation of Alvarion VL 54Mbps Subscriber on existing light or telephone poles
- Install mount to be determined upon completion of the site survey
- Install Outdoor CAT5 Cable and connect to
- Install Outdoor Battery backup
- Connect power to radio from pole (power connections will be defined after survey)
- Turn up and test radio
- Align antenna
- Connect to Tropos Gateway mesh node

Tropos Mesh Installation

- Install 259 mesh nodes on existing poles
- Mount Tropos Access Point to pole (exact mounting will be defined after survey)
- Connect power radio from pole (power connections will be defined after survey)
- Turn up and test radio
- Configure radio into Mesh Network

Completion Criteria: This task will be considered complete when all the wireless system components listed in Appendix xxxx have been installed.

Deliverable: None

Task Assumptions:

- 1) 20-30% of the Miami Beach Area may have sufficient mounting assets for a proper deployment of a mesh network. The southernmost and northernmost sections of the beach have mounting assets available for the mesh network design. All other areas of the beach do not have sufficient mounting assets that are conducive to utilizing the mesh network.
- 1) Mounting on existing street lights in all areas of the City is contingent upon the City's constraints related to acceptable wind load and structural design standards on the poles.
- 1) Many existing utility poles are not in disrepair or have power issues and may not support the wireless infrastructure. IBM will not be held responsible for lapse in coverage or schedule delays if City assets that are classified as suitable for mounting cannot be utilized because of their individual condition. The acceptance period will not be affected by these constraints.
- 1) IBM may utilize alternative technology to provide coverage in a more efficient manner by using supplements to mesh technology.
- 1) Solar power options may be considered for utilizing new utility poles where delivery of permanent power may take a long time.
- 1) Utilization of the smaller decorative poles in areas of Miami Beach will significantly reduce performance and create mounting issues.
- 1) A minimum of 60 locations will require strong mounting assets as the backhaul nodes have a greater wind load and weight. Deployment will require a total of 260 mounting assets suitable for handling the weight and the wind load of the equipment with a desired minimum height of approximately 25ft.

3.4 Wireless Network Testing and Tuning

Description: Perform final network testing and fine tuning.

Overall System Review and Tuning

- Perform System testing and document coverage
- Perform final tuning and re-allocation

Deliverable: Final Design and As-Built Report

Purpose: IBM will provide a final design and as-built report with all final design details for the City of Miami Beach Wireless Network.

Delivery: One hard copy will be delivered to the City of Miami Beach Project Manager.

Content: The report will consist of the following, as appropriate:

- IBM Installation Checklist
- Documentation on Components (Antenna, Mount, ODU, IDU, Cable, Lightning Protection, etc.) showing manufacturer, model numbers, serial numbers, configuration, frequency, and more.

Note: City testing and acceptance process is set forth in Section XI.

4. Program and Project Management Services

Description: The objective of this task is to provide an individual ("IBM Project Manager") to provide direction and control of IBM project personnel, and to establish a framework for project communications, reporting, procedural and contractual activity. The major sub tasks are:

1. Maintain project communications through the City of Miami Beach Project Manager.
1. Establish documentation and procedural standards for the development of this project.
1. Prepare a project plan at the onset of this project for performance of this Statement of Work. The project plan will define tasks, schedule and responsible person(s) or organization for each milestone.
1. Conduct project status meetings.
1. Prepare and submit monthly Status Reports.
1. Review and administer Project Change Control with the City of Miami Beach Project Manager.

Completion Criteria: This activity will be complete when the other activities described as IBM Responsibilities have been completed, according to their completion criteria, or IBM has met the criteria defined in the Completion Criteria section of this Statement of Work.

IBM's Project Management Office Description:

- a. IBM will provide a Single Point of Contact (SPOC) through its project management office.
 - i. Staffed by a senior PMI certified project manager
 - i. An IT Architect
 - i. Network Specialists
 - i. Administrative support

- i. IBM's project team including customer support and technical resources will report through the IBM Project Office to the IBM Project Manager.
- i. The IBM Project Manager will report directly to the City of Miami Beach's designated project manager for the wireless project.
- i. IBM will commit to utilizing network and office space at the Old City Hall location or a location to be determined with the City in order to provide a location for server hardware and physical work space for on the ground team members.
- i. Additionally, IBM may wish to work with the City to establish a physical office within the City of Miami Beach and will coordinate with the City to determine the details of such an arrangement. The local IBM team currently operates out of the Coral Gables facility where IBM has been based for the last 15 years.

Note: IBM will assess the integration of wired backhaul and present a solution to the City that complies with the requirements as set forth in the RFP.

SCHEDULE III

LIST OF POLES AND OTHER FACILITIES TO BE USED AS MOUNTING ASSETS

To Be Determined

SCHEDULE IIIa

IBM

Capital (Begins at contract execution)	YR1	YR2	YR3	YR4	YR5	YR6	Total
Base Proposal - Capital Costs	\$1,449,509						\$1,449,509
Option 2 Citywide Access	\$5,160						\$5,160
Total Capital	\$1,505,669						\$1,505,669
Operating (Yr 1 begins at acceptance)	YR1	YR2	YR3	YR4	YR5	YR6	Total
Base Proposal - Operating, Maintenance and Upgrade	\$438,379	487,965	523,138	533,880	538,576	505,975	\$3,049,291
Option 2 - Operating	\$0,470	104,474	104,474	104,474	104,474	104,474	\$12,840
	\$538,849	592,439	627,610	638,354	664,450	610,449	\$3,662,131
						Total	\$5,167,800
Base Proposal							
Capital	\$1,449,509						
Operating, Maintenance and Upgrade	3,049,291						
	\$4,498,800						
Option 2							
Capital	\$55,160						
Operating, Maintenance and Upgrade	\$12,840						
	\$68,000						
Total Cost	\$5,167,800						

SCHEDULE IIIb

ADDITIONAL OPTIONS

Cost Element	Y1	Y2	Y3	Y4	Y5	Y6	Total
Option Number 1: In-building (indoor) coverage to 90% of residences and businesses including high-rise buildings located in the City including separate costs for proposed CPE equipment. ¹	\$487,300	\$0	\$0	\$0	\$0	\$0	\$487,300
Option Number 2: Any additional infrastructure, deployment, management, software and cost increases for providing public access Citywide. (100% Citywide Hot Zone).	\$146,630	\$104,474	\$104,474	\$104,474	\$104,474	\$104,474	\$669,000
Option Number 3: Provide cost information for longer term battery backup for all network equipment sufficient to assure continuous operation at full power and functionality for a period of not less than ten (10) hours in the absence of utility power.	\$351,500	\$31,600	\$31,600	\$31,600	\$31,600	\$31,600	\$509,500

¹ This represents 100 units at a unit cost of \$4,873.00 that may be purchased at any time during the term of the Agreement. Additionally, the City may purchase additional units at the same cost as above over the term of the Agreement.

SCHEDULE V 1.1

WIRELESS NETWORK ELEMENTS AND SERVICES TO BE RENDERED TO THE CITY OF MIAMI BEACH

Wireless Network Architecture and Design

System Design Methodology

IBM employs a methodical approach to network design that centers around three progressively elaborated levels of granularity and detail. These phases provide the steps necessary to design a network - from the high level 'logical' design down to the detail design where vendor products are selected. This method allows us to take a modular approach built upon the City's functional and operational requirements. Using this model will help enable the development of a progressively more detailed set of network designs, each meeting the full set of functional requirements.

The first level of design (referred to as the Network Conceptual Design), provides for the basic building blocks of the network - showing logical connection points between network nodes and links.

The second level of design (Network Specified Design) adds required client attributes like performance, scalability, management and availability to the design. Additionally, generic network components (routers, switches) are selected.

The third level of network design (Network Node Design) provides for vendor products meeting the above design criteria to be specified and added to the detailed design.

This design methodology provides:

- A way of linking networking to other aspects of the IT and business organization at key design decision points: systems management, applications development, organizational change, testing, business continuity
- A hierarchical set of network designs - each providing more detail as the networking requirements are refined
- A flexible approach to constructing a network design in any environment - campus, international, LAN-based, WAN-based, etc.
- The input to the critical planning steps required for implementing and operating a network.

The design methodology addresses all documenting requirements of the solution, including the tiered infrastructure, NOC, and secure usage by government workers.

Backhaul Network

A resilient backhaul network leveraging wired and wireless connectivity in a multilayered topology is offered as part of our solution. The first backhaul layer is a distributed-wireless

backhaul network using unlicensed 5.8 GHz spectrum that connects to the WiFi network and consolidates to four primary backbone locations utilizing a point-to-multipoint connectivity scheme. The design proposes 49 distributed gateway points between the WiFi network and backhaul. At these points, Tropos gateway nodes or Base Stations are Ethernet connected to Alvarion 5.8 GHz subscriber units. The Alvarion subscriber units then wirelessly connect to one of 4 Alvarion multi-sector base stations which are co-located with microwave wireless ring connection points. Data is transferred from the wireless access layer, to the wireless backhaul, to the microwave ring. For public access traffic, the BellSouth network delivers the subscriber data to the Internet. Government worker traffic is routed separately to the City's internal network through a single demark connected to the microwave ring. Network traffic routing is managed by Layer 3 Cisco 3560 network switches.

The distribution network for Tropos and Base Station backhaul as well as any additional fixed locations the city requires is provided at the four core backbone locations as well as an additional location in South Beach, served by one of the by Alvarion 5.8Ghz base stations. The Multipoint network will consist of 5.8 GHz that will service the government as well as the private sector uses.

In addition to the high capacity of the distribution network, the multi-sector design supports true redundancy from a gateway subscriber connectivity level. The 360-degree design takes advantage of the inherent "best Access Unit" function of the Alvarion equipment. If a sector within a distribution site should fail, the gateway node subscriber will automatically switch to the neighboring base station at the distribution site. While performance may be affected during this time, connectivity is still maintained until the failed sector is repaired.

The four backbone nodes will backup one another via point-to-point wireless to increase overall backhaul network availability. Through the microwave network, traffic will route according to user type and application. Public access users will be routed through the Internet Gateway to the splash page and portal, as well as to the Internet. Government workers will be routed to the Internet to secured City applications and data based on their authorization through the City's VPN services.

WiFi Network

The user WiFi network is composed of a mesh environment using the 802.11g protocol supplemented with a Base Station solution using 802.11g/b. The mesh technology utilizes flexible coverage and connection routing to provide a high degree of performance and availability.

The WiFi cells automatically self organize and determine the best RF path to get to the local interconnect locations. These RF paths are continuously evaluated and altered as needed. Depending upon building density and foliage, approximately 33 nodes per square mile will be required for good coverage of the City. The requirements of low power handheld devices such as PDAs increase the required node density count due to the client side power issues. Coverage will propagate indoors, but this varies greatly depending on building type.

Where interference in the 5.8 GHz band exists or may exist in the future, 5.3 GHz Backhaul Nodes may be added in conjunction with or replacement for, the 5.8 GHz Backhaul Nodes. This provides an extremely resilient and flexible network for future growth and scalability.

The proposed design of the distribution network is based on 1 to 1.8-mile radius cells. Upon award, the full design and survey study will determine the exact required placement and actual coverage of each distribution site.

SCHEDULE V 1.2

WIRELESS ARCHITECTURE AND DESIGN GUIDING PRINCIPLES

- Support throughout the Coverage Area for wireless access from desktop PCs, laptop PCs, handheld devices, mobile phones and other manned or unmanned devices equipped with either an IEEE 802.11b or 802.11g wireless interface.
- Support throughout the Coverage Area for "Best-Effort" Service with an average net throughput of one (1) megabit per second (Mbps) upstream (client device to network) and downstream (network to client device) transmission.
- 70% in-building (indoor) coverage for residences and businesses within the Coverage Area. A residence or business is assumed covered under this requirement if a single, first or second-floor room, (e.g. adjacent to an exterior wall in residence or business), can access the wireless network at the stated best-effort services levels. 95% in-street (outdoor) coverage for devices within the Coverage Area with no additional hardware required beyond the device's standard wireless interface.
- Support for having parks, common areas and other public spaces within the City defined and managed to allow any user with a mobile device to gain free and open access to the System while in these areas.
- Battery and/or solar power backup for all Network Equipment sufficient to assure continuous operation at full power and functionality for a period of not less than ten (10) hours in the absence of utility power.
- Support for a mixed wireless and wired "backhaul" solution to aggregate Wi-Fi Network traffic from multiple Subscribers and access points back to an Internet point of presence ("PoP").
- Support for pole, roof and wall mount options for wireless Network Equipment.
- Compliance to IP56/NEMA4 dust and water ingress ratings for all outdoor-mounted Equipment.
- Support for ambient temperature ranges of 0 F to +122 F for all outdoor-mounted Equipment.
- Support for all outdoor-mounted Equipment to withstand wind loads up to 150 mph and consistent with any codes and/or regulations that may exist within the City of Miami Beach, with no impact to operation of the System.
- Protection against power surges, including lightning strikes, for all electrical and Network connections.
- Support for the logical segmentation of the System to support different "domains" of users. This must include the ability to define and manage different profiles for authentication, encryption and other service characteristics based on the requirements of each user domain.
- Support for seamless, in-motion usage throughout the Coverage Area by government users. This includes the ability for Subscribers to maintain "session-level" persistence while the subscriber's device is in motion at speeds up to sixty (60) miles per hour. This capability must be supported with no interruption to applications running on the device.
- Support for both 32 bit (IPv4) and 128 bit (IPv6) IP Addressing, including multicast and any cast support.

- Support for the prioritization of Network traffic for specific applications, users, devices, and domains.
- Fault tolerance mechanisms to mitigate and/or eliminate single points of failure for all components of the System.
- Guaranteed reliability of 99.9% for the 802.11g and 802.11b tier of the System and 99.999% for the backhaul and PoP tiers of the System.
- Sufficient capacity throughout the System to support the subscriber projections defined by the City at the service levels described above throughout the contract term. These subscriber projections are provided below for reference:

Subscribers Analysis	Estimated Subscribers (thousands)
Residential	2.7
Internal Government Use	1.0
Daily Visitors	1.1
Total Subscribers	4.8

- Scalable to support additional users, capacity, and functions throughout the contract term. Given that specific, future subscriber and/or public access applications are not defined in the RFP, it is critical for Proposers to elaborate on how their proposed solutions can scale and adapt in a modular way to increase coverage areas, users, capacity and functions.

SCHEDULE VI

City of Miami Beach Government User Wireless System Security Solution

IBM will work with Miami Beach to design and implement the wireless system security solution for Government users that are using the wireless network for government network application access.

1) Government User Wireless System Security Solution Design

Description: Through a series of two structured workshops with the City of Miami Beach, IBM will work with the City of Miami Beach to define and document the wireless security architecture. The architecture will include physical and logical views including authentication, authorization, user repositories, and City of Miami Beach administration requirements if any.

The major sub tasks are:

1. Conduct up to two (2) half-day requirements gathering workshops with key technical personnel to identify and document the business and technical requirements for wireless security integration.
2. Document the City of Miami Beach wireless security to include encryption, authentication and acceptable protocol requirements in the Requirements Document
3. Develop and document the City of Miami Beach Government user design in the Solution Design Document
4. Review Solution design document with the City of Miami Beach
5. Develop a bill of materials for proposed solution for review by the City of Miami Beach
6. Develop and document the Security System Test Plan

Completion Criteria: This task will be considered complete when the wireless system security requirements, design, and test plan have been submitted to the City of Miami Beach project manager.

Deliverables:

1. Wireless System Requirements Document
2. Wireless System Solution Design Document
3. Wireless Security System Test Plan

Task Assumptions:

1. Essential City of Miami Beach personnel will participate in the Wireless Security System requirements definition and design workshops.

2) Implement the Government User Wireless System Security Solution

Description: IBM will implement the agreed to security solution as documented in the design documents.

The major sub tasks are:

1. Procure hardware and software required to implement the agreed to wireless security design
2. Develop implementation schedule with the City of Miami Beach during agreed to maintenance windows.
3. Assist the City of Miami Beach with the documentation required to comply with operational or change control processes.
4. Configure all hardware and software
5. Install all hardware and software in the designated City of Miami Beach location.

Completion Criteria: This task will be considered complete when the security system infrastructure has been configured and implemented.

Deliverables: None.

Task Assumptions:

1. The City of Miami Beach will require one instance of the required security infrastructure.

3) Implement the Policy for the Government User Wireless System Security

Description: Configure and implement the security policies and settings on the agreed to security infrastructure including but not limited to IBM provided security devices.

The major sub tasks are:

1. Install and configure the 2 Access Control Servers and 1 WLSE server specified in Appendix A.
2. Develop security settings for the Mobile Access Router Wireless Mobile Interface Cards.
3. Execute Wireless Security System Test Plan
4. Provide documented security policies to be implemented by Miami-Dade.

Completion Criteria: This task will be considered complete when the security policies have been implemented and testing is successful, according to the security system test plan as set forth in Step 1, above.

Deliverable: None

Task Assumptions:

- 1) The City of Miami Beach will be responsible for the procurement, implementation and configuration of any portions of the City of Miami Beach Government User Security solution that involves changes or additions to any data servers, client devices, or existing infrastructure components not limited to existing City of Miami Beach firewall, VPN and other related devices.

SCHEDULE V 1.4

WIRELESS NETWORK INSTALLATION REQUIREMENTS

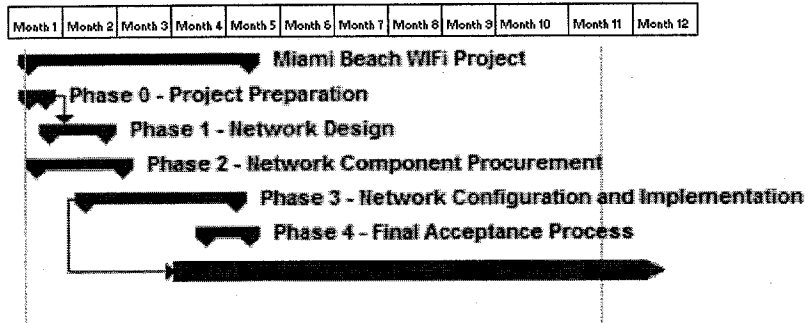
- The installation and configuration of all Network components, access points, routers, bridges and other Network Equipment.
- Coordination with the City and any other parties required for access to any structural assets, facilities or permits required for the installation of the System.
- The ramp-up and activation of all Services to include but not be limited to customer Service, technical support, hosting, OSS, Network management Systems, processes and personnel.
- The configuration and integration of all components in the Systems.
- A safety plan detailing precautionary measures taken to mitigate risks during installation.

High Level Project Schedule

This schedule governs delivery notwithstanding any other language in Agreement including Section V, 1.4.

IBM is proposing the following project deployment schedule and methodology. By working with the City, together we will be able to accomplish the City's goal to have the wireless deployment completed by the end of June. The feasibility of this plan has several dependencies associated with it and assumes the availability of adequate City owned mounting assets throughout the City as well as the integration of the City's Public Works resources into the project schedule. IBM will work closely with the City of Miami Beach to identify the amount of resources and will present the schedule that the City of Miami Beach will meet in order for IBM to maintain its project schedule. Together, the City and IBM can have the citywide public hotspots operational as soon as possible.

There are five phases defined in the plan below. Note most major tasks have been "fast tracked" or have been schedule to run in parallel with their predecessors instead of having a "Start to Finish" relationship. In order to accomplish this, IBM will introduce additional resources than previously planned to expedite the schedule and meet the City's desired schedule. There are a total of four engineering/design teams and four deployment teams scheduled. IBM will work with the City to adequately identify the required City resources to execute this schedule and identify contingency plans to ensure a timely completion



The City of Miami Beach and IBM will jointly finalize the detailed project schedule during the design phase of the project.

Acceptance and Payment: The payment schedule will be based on a partial payment schedule according to successful completion of each Phase described above.² The payment schedule for the Year One Capital Cost will be as follows:

- (i) Notice to Proceed 20% of the Year One Capital Cost
- (ii) Phase 1 20% of the Year One Capital Cost
- (iii) Phase 2 20% of the Year One Capital Cost
- (iv) Phase 3 20% of the Year One Capital Cost
- (v) Phase 4 20% of the Year One Capital Cost

² Milestones are set forth in Schedule V 1.4.

SCHEDULE V 1.5

TELECOMMUNICATIONS PROVISIONING AND SERVICES

Description: IBM will provide an Internet connection to support the public users. Internet bandwidth will be provisioned as needed to support the requirements of the network according to the number of registered and recurring users up to 100mbps. This level of service will provide more than adequate bandwidth if the network utilization is maximized.

The major subtasks are to:

1. IBM will provide customer premise equipment to provide connectivity to the Internet through service provider of choice.
2. Provision network bandwidth to support registered and recurring users.
3. Provide all monitoring, management, troubleshooting, repair and/or replacement of the customer premises equipment.

Completion Criteria: This task will be considered complete when this contract expires.

Deliverables: None

Task Assumptions:

- 1) The City of Miami Beach will provide a secure data closet or data center space to house the telecommunications equipment and circuit termination.

SCHEDULE V 1.6

WIRELESS NETWORK MONITORING AND MANAGEMENT
REMOTE MONITORING: TROPUS WIRELESS MANAGEMENT SYSTEM

Description: IBM will provide the City of Miami Beach with monitoring and management services for the wireless network.

24/7 Equipment Monitoring/Dispatch/NOC/TAC

- Document system configuration, Signal Levels, BERs for baseline maintenance agreements.
- Set up and define Network Operations Center Procedures
- 24/7 Monitoring of all wireless devices on the network for availability and signal strength (where available by device). This monitoring function shall include monitoring by IBM of all of the following:
 - All equipment listed in Attachment
- Incident Ticket Reporting to Customer on the status of outages, dispatch and repair.
- 24/7 Telephone/Email Technical Assistance and Dispatch
- Online link history statistics

The Tropos Control management system will be utilized by the remote operations center and the City of Miami Beach Network Operations Personnel.

Tropos Control allows Network operators to perform important functions, including over the air configuration and updates of Tropos MetroMesh routers, whole Network performance monitoring and statistical capture - including simple point-and-click graph creation, real-time link state and client connectivity monitoring and user-defined functions such as MAC address filtering and rogue client blacklisting.

IBM will manage the environment utilizing the following features:

- Deployment & Provisioning
 - Provides mechanisms to deploy any combination of Tropos MetroMesh routers from one router to an entire Network in a simple process at both initial installation and in subsequent moves, adds and changes.
 - Allows routers to be provisioned over the air using a simple profile, highly customized profiles, or multiple profiles.
 - Enables policy-based user management for access and security tailored to the applications running on the Network and the kinds of users connected to it. Supports allow/deny lists , MAC address filtering, rogue client deny lists.

- Global and incremental Software upgrades. Allows the Network to be viewed as a single device for upgrade purposes. Designed to meet the unique upgrade needs of metro-scale mesh Networks
- Monitoring
 - Offers a unified Network view to see and manage the entire Network from a variety of views, including a geographic view of the nodes and gateways superimposed over a map of the installation
 - View, identify and diagnose problems with alarm monitoring tools and root cause diagnostics: Control can display total alarms and events by category in a single view as well as details on each of those alarms. Control enables the customer to see Network alarms on a Network or cluster in tabular view.
 - Provides tools for alarm reporting and notification:
 - Fully supports remote access to the Network and all Control functionality can be accessed remotely
- Managing
 - Watch, in real time, all Network activity through a series of Network views
 - Performance measurement tools to track path throughput
 - Custom and standard reporting
 - Capabilities to integrate with Network management Systems (including CiscoWorks): it can operate as a standalone System, integrate with a customers existing NOC, or manage other Network devices.
- Reporting
 - Control provides standard and custom reporting for a variety of events and alarms within the Network. This reporting can include:
 - Transmit and receive traffic through nodes and gateways
 - Client counts by node or gateway
 - Client Signal to Noise Ratio levels

SCHEDULE V 1.7

WIRELESS NETWORK MAINTENANCE

Level I: Preventive Maintenance

Preventive Maintenance shall include a semi-annual checkup of all wireless Equipment and connectors. Vendor shall conduct an inspection of the backhaul and multipoint outdoor placed Equipment on towers and rooftops twice a year. Due to Florida's hurricane season, the routine inspection shall be conducted by June 1st of any given calendar year and no later than January 1st of the following calendar year.

As part of the maintenance Agreement, Vendor shall perform the following during a semi-annual preventive maintenance inspection:

- Document current RSS signal levels compared to installation baseline
- Inspect and replace any damaged weather sealing
- Inspect and replace any loose cable termination points
- Perform a Spectrum Analysis at the site, if necessary
- Align the antennae for optimum performance and tighten any mount points
- Software and firmware upgrades

Vendor shall conduct installation of firmware upgrades as part of the maintenance Agreements.

All preventative maintenance delivered hereunder shall be included and City shall not be subject to any additional costs for preventative maintenance within ____ days of the upgrades being commercially available.

Level II: On-Site Emergency Service

If problems with the Network cannot be resolved remotely, Vendor shall provide on site emergency support Service within a 4-6 hour response time to resolve the issue.

Level III: Preventive Maintenance, On-Site Emergency Service and Equipment Replacement Service

In addition to the above Services, Level 3 adds Equipment Replacement Service, Vendor shall provide full replacement of any failed Equipment on the Network immediately.

24/7/4 Equipment Replacement and Labor Services Description

- (2) Inspections per year on backbone equipment only
 - Document current RSSI signal levels compared to installation baseline
 - Inspect and replace any damaged weather sealing
 - Inspect and replace any loose cable termination points

- Align the antennae for optimum performance and tighten any mount points

Task Assumptions:

1. This Maintenance does not include coverage for incidences considered “Acts of God,” “Acts of Vandalism,” “Acts of Terrorism,” or accidents; either covered or not covered by Client’s insurance. If Maintenance issue is determined by IBM to be caused by any of these acts, IBM will charge Client, and Client shall pay, for IBM’s time and materials, including travel charges.
2. If the failure is due to Client configuration error, IBM will charge Client, and Client shall pay, for IBM’s time and materials, including travel charges.
3. This Agreement does not include coverage for failure due to radio frequency interference.

SCHEDULE V 1.8

SOFTWARE HOSTING AND OPERATIONS SUPPORT SYSTEMS (OSS)

A carrier-class Operational Support System (OSS), roaming and Clearing hosted platforms enable Service and Network providers with a solution to provision, deploy and manage their wireless Networks and roaming activities, in addition to simplified hot spot and metro zone set-up and management.

The RoamBOSS Metro leverages the power of these two platforms (OSS and Clearing). RoamBOSS Metro is a metro class OSS with carrier-class roaming and clearinghouse capabilities. By combining the power of WiBOSS subscriber and Network management capabilities with the roaming and interconnect engine of InterRoam hosted platform, metros now have a neutral host platform on which to easily deliver wireless broadband access to residents, ad hoc users, city employees and transient roamers throughout their areas.

It allows providers to manage their customer base and multiple venues within a metro scale wireless broadband Network. The hosted metro solutions support Networks for both public and private use, and offer the flexibility and roaming convenience of using one Login ID.

WiBOSS Lite (Wireless Broadband Operational Support System) is a powerful hosted application that performs the back-office tasks necessary to operate and manage public Internet access Services for free hot spots, such as subscriber management, provisioning, policy enforcement, registration, branding, reporting, and Network management.

As features are enhanced and added, changes immediately take effect Network-wide. Access to these features is provided through the web-based WiBOSS Control Center, from any connected computer in the world. WiBOSS Lite includes the following features:

- Our web-based Provider Control Center allows you to track usage and much more from anywhere in the world
- Custom branding of the Web Portal including public announcements or local advertising
- Usage policy enforcement
- Interoperates with RADIUS based public access controllers
- Works with any broadband Internet connection
- WiBOSS Alert Option-Our built-in alert System will monitor your hot spots
- 24x7x365 and alert you in the event of an incident. Your mobile phone, pager or email can receive alerts

SCHEDULE V 1.10
IN-MOTION LICENSING REQUIREMENTS

Vendor shall be responsible for providing to the City a solution which provides Application Session Persistence at speeds up to sixty (60) miles per hour. The City currently holds the licenses to 280 NetMotion Mobility XE users. Vendor shall make available to City 600 additional NetMotion Mobility XE licenses at a rate of 150 user licenses annually. Should the City, in any given year, not acquire all 150 licenses, Vendor shall make these licenses available in subsequent years on a roll over basis. Should the City desire to acquire, in any given year, any number of licenses beyond the annual provision of 150 licenses, Vendor shall make available those additional licenses and permit City to draw upon the required 600 licenses. Should the City desire to purchase any additional licenses beyond the 600 as provisioned for this Agreement, Vendor shall make additional licenses available on a per-licenses basis at the same fractional cost as the stipulated 600 licenses. Should Vendor decide to change the software employed for obtaining session level persistence, Vendor shall provide, at its cost, any replacement software for the licenses already in service.

SCHEDULE VIII

CUSTOMER SERVICE AND TECHNICAL SUPPORT

Customer Service and Technical Support - The Customer Service Center (CSC) will provide end-to-end customer care and technical support for the city-wide wireless broadband Network public access users and level 2 support for government users.. The center will be a Single Point of Contact (SPOC) and will maintain end-to-end ownership of request for Services, including those that may need to be referred or escalated for resolution. The SPOC will act as a central focal point for logging, tracking, reporting, and end-to-end management of problems and issues related to the City. Coverage for the wireless Network will be provided 24 hrs a day, 365 days a year. The SPOC will operate as a virtual extension of City IT support staff to answer technical questions and to resolve problems in connection with the wireless broadband Network.

The Customer Service Center will be located in a Vendor selected site. Wireless Network Subscribers and City staff will be provided a toll-free 1-800 phone number for contacting the Service Desk. The Customer Service Center includes tools and procedures to provide the appropriate assistance for callers' Service requests, allowing the CSR's to focus on complex problems while routine requests are resolved through automated responses or processes.

The CSC customer Service representatives will receive telephone calls (or e-mail) from public access users and City of Miami Beach Support staff, and will follow mutually agreed-to processes and procedures to triage a call, provide basic support and if required, transfer the call to the appropriate resource for subsequent resolution. The SPOC will monitor and/or escalate problems and requests for Services as necessary.

IBM will provide 24/7 Telephone Support and On-Site Emergency Maintenance Support with qualified technicians and replacement parts:

IBM will provide 2-4 hour Telephone Response. In the case of a down radio, IBM will provide 4-6 hour on-site response, weather and daylight permitting, unless otherwise postponed by Client. IBM will diagnose the source of the problem and will repair or replace, at IBM's option, such products or parts thereof which, on inspection by IBM, are found to be materially defective. IBM will repair or replace said products or parts within 24 hours of IBM's diagnoses of the problem. All products that are replaced become the property of IBM.

Call and Problem Management - Calls to the Help Desk are logged into a problem and call management repository. Problem Management includes documenting problems, routing those problems to the responsible personnel for resolution, recognizing recurring problems, reducing the impact of problems, and reducing the number of problems that occur.

Call Categorization- Based on the nature of the call as identified by the caller, the call will be routed to an appropriately skilled customer Service representative. This representative will ask questions to clarify symptoms of the issue so that we can provide the appropriate level of support. Vendor assigns each call to a category and follows each category to assess its impact.

If during the initial call, the customer Service representative cannot resolve an issue, then the problem may need to be transferred to the next level of support.

Problem Tracking - Problem records will be logged for every reported problem. These records provide an up-to-date status and history for problems and their resolution. CSC will be responsible for making sure problem records are created and regularly updated to reflect the status of the problem and its resolution.

Frequently Asked Questions & Self-Help Database – Vendor shall provide and maintain a database of Frequently Asked Questions (FAQs) including records of solutions to common problems, to enable wireless broadband Network users quickly find and solve their problems without the need, and associated costs, of having to speak to a Customer Service Representative.

Service Outage Process- When there is Service interruption or Network outage, Vendor shall proactively notify Network users and callers of the Service interruption or Network .

Components of Support Desk will include the following:

- Providing a Single Point of Contact for end users
- Receiving requests via phone call and electronic mail
- Assigning call priority
- Performing basic problem determination
- Resolving problems/requests
- Accessing appropriate Knowledge Databases
- Referring problem/request to following agreed-to-process and procedure
- Closing problem / request records
- Documenting and maintain Vendor processes and procedures
- Training Customer Service Representatives
- Providing Service Level Reporting through Standard Monthly reports which will include:
 - Total call and types of calls
 - Abandon rate
 - First Call Resolution

Problem Management Tool

Vendor will use a problem management System. Vendor support staff will access system directly on an internal Network. Vendor shall provide access for City IT Support staff via the open Internet Using a web browser interface. The City support teams will access the System to view, update and manage problem records and initiate ad-hoc queries on tickets. Vendor shall support and maintain System availability to comply with Service Level Objectives. General tasks will include:

- Maintaining functionality of tool during the term of the Agreement
- Providing access rights, passwords and connectivity to the e-ESM problem management System for the execution of Services
- Providing appropriate administrative access levels and rights to create and distribute ad hoc queries from the call/problem management tool
- Providing System availability 24 hours a day x 7 days a week, excluding schedule maintenance windows, to support Service Level compliance.

Technical Support Services

Vendor will answer general questions about the functionality of the wireless Network. For example: Do I need a wireless card? How do I use the Service or is my connection secure? In addition to such customer care-related issues, Vendor also provides support for technical issues. As products and technology evolve, the scope of support will be tailored to incorporate these changes. Technical support for the end users will include:

Basic WiFi Card Driver Support

Vendor will attempt to determine if the end-user has a working WiFi Card that is locating a wireless signal using guidelines set forth by the most common types of WiFi cards. Vendor will not install, remove or otherwise modify the installation of such devices. The settings of these devices will need to be handled by the actual hardware manufacturer or other responsible party.

SSID configuration

IBM will verify the correct SSID for the location being accessed by an end user. IBM Support will attempt to verify that the end user has the correct SSID set in their Network Connection profile, using basic guidelines developed for the most common operating Systems, and the most common WiFi cards.

Login/Access Difficulties

IBM will review with the end user, the correct format for the login/access parameters on the access screens. IBM will attempt to verify that the correct settings are enabled in the end user's browser, and verify that the end user is not using security Software that may be blocking access.

Location Specific Coverage

IBM Support will verify the location details of the Hotspot that the end user is accessing and will direct the end user to the most appropriate coverage locations listed in the Hotspot Directory.

E-mail

IBM support will provide the end user with the settings needed to send and receive email over a wireless connection using the most common email programs.

VPN issues

IBM will assist an end user set up a new VPN connection by directing the end user to the Windows Network setup wizard. The Call Center will direct the end user to their own Network Administrator for any settings on an existing VPN that the end user is trying to access.

Note: Page 13 of IBM's Best and Final Offer sets forth Capacity Assumptions and is incorporated herein, subject to discussion.

SCHEDULE X

CONSTRUCTION & ACTIVATION SCHEDULE

See *supra* Schedule V 1.4.

DRAFT TO BE DISCUSSED

SCHEDULE XIII

UPGRADES AND STATE OF THE ART

- The Parties anticipate that:
 - Beginning Year 2, includes replacement of mulitpoint product with products that add Support for Wimax Base Stations/Base Units, depending on availability of product from manufacturer.
 - Beginning Year 3, includes replacement of all mesh network hardware, with the addition of WiMax gateway support.

SCHEDULE XXIII

LIST OF PRE-APPROVED SUBCONTRACTORS

Some of the Services may be performed by an IBM subcontractor. If an IBM subcontractor assists with the project, IBM is solely responsible for completion of the work described herein and compliance with the terms hereof and coordinating any involvement of IBM subcontractors who may be engaged to assist IBM in accomplishing the work described herein.

List of subcontractors:

Business Information Group (BIG)

Trident Telecommunications, Inc.

AirPath, Inc.

BellSouth

SCHEDULE XXVII 1.3

LIQUIDATED DAMAGES

(To be negotiated between City and IBM)

SCHEDULE XXVII 1.4

FORM OF LETTER OF CREDIT

Date of Issue

Issuing Bank's No

Beneficiary:

Applicant:

City of Miami Beach
1700 Convention Center Drive
Miami Beach, Florida 33139

Amount:
Expiring:
(Date)

We hereby authorize you to draw on _____
(Bank, Issuer name)
at _____ by order of and for the account
(branch address)
of _____
(contractor, applicant, customer)
up to an aggregate amount, in United States Funds, of _____
available by your drafts at sight, accompanied by:

1. A signed statement from the City Manager of the City of Miami Beach, or his authorized representative, that the drawing is due to default in performance of obligations on the part of _____

_____ agreed upon by and
(contractor, applicant, customer)
between City of Miami Beach, Florida and _____
(contractor, applicant, customer)
pursuant to the Bid/Contract No. _____ for _____
(name of project)

Drafts must be drawn and negotiated not later than _____
(expiration date)

This Letter of Credit sets forth in full terms of our undertaking, and such undertaking shall not in any way be modified, amended, or amplified by reference to any documents, instrument, or agreement referred to herein or to which this Letter of Credit is referred or this Letter of Credit relates, and any such reference shall not be deemed to incorporate herein by reference any document, instrument, or agreement.

We hereby agree with the drawers, endorsers, and bona fide holders of all drafts drawn under and in compliance with the terms of this Letter of Credit that such drafts will be duly honored upon presentation to the drawee.

The execution of the Contract and the submission of the required Performance and Payment Guaranty and Insurance Certificate by the _____ (contractor, applicant, customer) shall be a release of all obligations.

This Letter of Credit is subject to the "Uniform Customs and Practice for Documentary Credits," International Chamber of Commerce (1993 revision), Publication No. 500 and to the provisions of Florida law. If a conflict between the Uniform Customs and Practice for Documentary Credits and Florida law should arise, Florida law shall prevail. If a conflict between the law of another state or country and Florida law should arise, Florida law shall prevail.

Authorized Signature

SCHEDULE XXVII 1.5

FORM OF CONSTRUCTION LETTERS OF CREDIT

To be conformed with Agreement Language

SCHEDULE XXVIII

PUBLIC BENEFITS

1. *High Rise and Condominium Installation Discount Program*

- a. IBM will provide packaged pricing to Condominium and Multiple Dwelling Unit associations referred by the City of Miami Beach for wireless access.
- b. Each multiple unit dwelling requires an inspection and determination of the most appropriate solution(s).
- c. Options for deployment:
 - i. Distributed Antenna Systems
 - ii. Wireless bridge from the City Wide wireless network
 - iii. Fiber, if available
 - iv. Internal access points
 - v. External wireless base station
- d. Packaged pricing
 - i. These prices are offered on a multiple unit basis.
 - ii. Pricing will be extended to the City of Miami Beach referrals at State of Florida Contract terms and pricing generally reserved for State and Local entities only.
 - iii. Current hardware discount rate associated with this solution is 25% off list price for the Alvarion equipment.
 - iv. Services will be offered in terms consistent with the State of Florida Services Contract on a fixed price basis.

2. Miami Beach Schools and Citywide Content Filtering Solution

The City of Miami Beach has requested a Content Filtering solution as an addition to the Citywide Wireless Network to enforce usage policies the City may wish to establish.

- a. IBM can provide the Websense Enterprise Suite as an enhancement to the WiFi Solution for filtering and reporting.
- b. IBM is proposing a filtering software and services bundle to include:
 - i. Websense Enterprise Suite
 - ii. Unlimited database downloads
 - iii. Software maintenance for filtering
 - iv. Monitoring and Reporting
 - v. Configuration and Integration Services into WiFi Network
 - vi. Standard Technical Support
- c. Special bundled pricing is offered for blocks of 2000 licenses and subscription term of 34 months.

Description	QTY	Per Seat List Price	Ext List Price	Discount	Extended Discounted Price
Websense Enterprise for 2,000 Internet Access Devices for 34 month subscription	2000	\$42.00	\$84,000.00	35%	\$54,600.00

3. IBM Community Outreach Commitment

IBM will work with the City of Miami Beach, Miami-Dade Schools, and other not for profits including organizations that provide services to the elderly at the City to explore similar opportunities for community outreach as a commitment to our partnership. IBM will provide the following:

- a. **Promote Technology Careers in the Classroom Program**
 - i. IBM will provide three one to two hour labs per year to introduce the children of the City of Miami Beach to the range of exciting, profitable careers in engineering and IT.
 - ii. These labs are available to any of the City's Schools or Community Centers.
 - iii. The presentations and labs can be offered to the City's children from ages 11 to 17. The content, presentation, and activities will be tailored to the target age group.
 - iv. There are four engaging presentations to choose from and each includes hands-on activities and will make the school or community center visit fun, easy and successful. Presentations and activities include:
 - Encourage math & science – children 11-14
 - Encourage math & science – children 14-17

Preparing for an IT career
Preparing students presentation
Preparing students presentation (with animation)
IT Careers: Getting started and activities guide
IT Careers: Workplace simulation
IT Careers: Jobs overview
IT Careers: Discussion starters

- v. These sessions will be conducted by qualified IBM employees who are engineers or IT Professionals that have completed the 2 hour training requirement to lead these workshops.

b. Technology Workshops and Training for Teacher, Community Center Personnel, Adults and Seniors

- i. IBM will provide 3 technology training workshops per year
- ii. These workshops are available to any of the City's Schools, Community Centers, or senior homes.
- iii. The workshops will be targeted and customized as applicable for teachers, education staff, parents or seniors.
- iv. The purpose of these workshops is to help participants learn about acceptable Internet use and challenges/concerns about integrating technology into education or community programs
- v. Each workshop can consist of any two of the following sessions plus Module 8 – City of Miami Beach WiFi Network Overview:
 - MODULE 1: Getting Connected
 - MODULE 2: Tips for Searching the Internet
 - MODULE 3: Downloading from the Internet
 - MODULE 4: Netiquette
 - MODULE 5: Internet Troubleshooting
 - MODULE 6: Fun things to do on the Internet
 - MODULE 7: Safety on the Net
 - MODULE 8: City of Miami Beach WiFi Network Overview
- vi. IBM will provide all the materials for each session including the presentation materials, participant handouts and activity worksheets.
- vii. IBM will coordinate the use of each facility's computer resources if required for a particular session.

4. Miami Beach Schools Technology Program

- a. IBM will provide thirty (30) PCs to the City of Miami Beach Commission to distribute specifically for the use of the underprivileged.
- b. IBM will donate these PCs to an existing 501.3c organization.

5. *IBM Corporate Employee Purchase Program*

- a. IBM will create and manage a customized Purchase Program portal site specifically for the City of Miami Beach and its residents to provide the same level of discount for IBM and Lenovo products available to IBM employees.
- b. Program is available to Miami Beach City employees for personal use
- c. Program is available to Miami Beach residents for personal use
- d. Discounts are in addition to special promotions.
- e. Purchasable items include notebooks, desktop PCs, monitors, keyboards and other accessories.

6. *Capacity Injection for Events*

Though the proposed network is designed to handle a higher user load than Miami Beach initially requested, there may be a need to augment capacity in areas where an event is concentrated.

The method IBM will use to deliver consistent service to the guests and residents of Miami Beach will be through the network operations center. IBM will baseline the network activity at all points of the network on a regular basis so that existing capacity can be gauged. As events are expected, IBM will be able to determine if excess capacity might be needed.

1. IBM will provide a capacity injection kit and will deploy it to a specific area where an event might warrant additional capacity.
 - a. The Capacity Injection Kit will consists of:
 - i. Quantity of 5 Tropos 5210 Metro Mesh Routers
 - ii. Quantity of 1 Alvarion 5.8GHz CPE (SU-A)Subscriber Unit
 - iii. Site survey
 - iv. Configuration and Implementation Services
2. Each capacity injection kit will provide up to 270mbps of additional capacity at the access layer and 45mbps at the backhaul layer.
3. The cost of the deployment and equipment for the capacity injection kit will be \$24,200 to \$30,000.
4. The price range and capacity estimates are contingent on:
 - a. The proximity to an existing backhaul aggregation point
 - b. Line of sight conditions to an existing backhaul aggregation point
 - c. Having sufficient capacity at the target backhaul aggregation point to handle the increase in capacity

- d. Having adequate city supplied mounting infrastructure and power on which to deploy the injection capacity kit.
- 5. IBM will determine the best solution to provide the required capacity as the requirements for a specific event become available and the site survey is conducted.

7. *Session Persistence*

IBM's proposal includes a solution for session persistence for 600 licenses for usage by City employees:

- a. Netmotion is the preferred solution, as it is already in use by the City.
- b. Netmotion will be provided in Year 2 through Year 5 at 150 licenses per year as requested by the City should it be required for session persistence.
- c. The existing City owned Netmotion licenses are transferable to the new WiFi environment.
- d. The solution will allow a session to remain active while crossing through dead zones and through pieces of the technology infrastructure that provide the access layer.
- e. The solution accommodates the ability to go outside of the WiFi network and connect over neighboring networks, assuming backend connectivity and policy arrangements have been put in place between Miami Beach and its neighbors.
- f. The solution encrypts all traffic between the client and Miami Beach server using AES encryption at varying cipher strengths that are configurable.

8. *Location Awareness Capability*

IBM will explore the applicability of location tracking with the City of Miami Beach by evaluating various hardware and software solutions that run on the WiFi network at no charge to the City.

9. *Wireless Connectivity for Causeway and Jail Routes*

IBM will explore with the City various methods to establish "out of city" network connectivity for public safety officials who need to travel outside of the boundaries of the Miami Beach WiFi network.

- a. IBM will provide exploratory services in the amount of 100 hours to establish a desired solution.
- b. IBM will extend the State of Florida hardware contract pricing for the elements of the network being deployed in Miami Beach. This pricing is currently between 20% and 35% off of list price depending on the specific hardware. Options include:
 - i. Roam to another network via session persistence.

- ii. Extend coverage through access point or base station technology deployments.

10. Mobile Building and Permitting

IBM will provide advisory consulting services up to 40 hours to the City of Miami Beach to determine the options to bring the permitting application into the field and onto the WiFi network.

11. WiFi-enabled Multi-space Parking Pay Stations

IBM will provide up to 100 hours of integration consulting support through to assist with bringing the parking meter solution onto the WiFi network. This includes such tasks as:

- a. Bench testing
- b. Integration into the terminal management system
- c. Field testing and validation of real time statistics
- d. Identification of work required to integrate the meters onto the wireless network

12. IBM Accessibility Technologies

IBM will provide a trial version and special pricing for a tool that is not commercially available to other organizations to improve accessibility of the Miami Beach web site. Capability includes:

- a. Downloadable software from the web site
- b. Unlimited number of users per web site
- c. Allows customizable color, sound effects
- d. Reads text aloud in 9 languages, with adjustable speed, volume control
- e. Purchase price: \$50,000 - \$60,000 Y1
- f. License and support services: \$16,000 - \$20,000 Y2 forward

13. Mobile Incident Command Trial

IBM will provide one NIMS 2.0 compliant Mobile Incident Command prototype for a trial period of 60 days.

Specifics of the trial include:

- a. 60 day trial duration
- b. One mobile hardware device, including, software, and support
- c. Solution is NIMS 2.0 compliant

14. Governmental and Packaged Solutions for Fixed Video and In-Car Video

The IBM team has developed comprehensive offerings for stationary and in-car video capture for States and Local Governments. This includes digital video capture system, integration services, and data management software and hardware. Our offerings are backed by a team of skilled consultants and technologists to accomplish these complex solution objectives. We are well positioned to efficiently provide the equipment and related services to support the deployment of digital video system and the management of the video captured. In addition to our technology capabilities and knowledge, we have years of experience working with state and local law enforcement organizations nationwide.

- a. IBM will provide a free pilot the City of Miami Beach consisting of a 30 day trial for one car outfitted with one camera.
 - i. IBM will provide the server and storage required to capture up 6 hours of video at 15 frames per second. The video will be stored for 5 days during the pilot.
 - ii. One existing City of Miami Beach workstation will be set up to view the video.
 - iii. IBM will install the equipment in one City of Miami Beach vehicle.
 - iv. The City of Miami Beach will provide network connectivity for the server.
- b. IBM has estimated the following pricing for future and potential Digital Video Solutions for Miami-Beach:

- i. Stationary/Fixed Video --\$2,000-\$12,000 Per Camera (Minimum of 20 cameras)

- OR -

- ii. In-Car Digital Video--\$9,000 - \$10,000 Per Vehicle (Minimum of 20 vehicles)
 - iii. These estimates include all software and the server with internal storage based on the following assumptions:
 - 1. Mpeg 4 video is captured and stored at 15 frames per second using CIF (352x288) or QCIF2 (704x288) resolution (These are standard specifications in terms of format and quality for digital video surveillance.)
 - 2. A maximum of 6 hours of video is captured daily (A typical high end estimate is 2 hours of video per shift.)
 - 3. The video will be stored on the server for 30 days.

For In-Car Video Solution the following assumptions and City of Miami Beach responsibilities apply:

- 1. The City of Miami Beach will utilize existing Mobile Data Terminals (i.e. laptops in vehicles) which have at least 5 GB of free space on their internal hard drive for storage.
 - 2. IBM will determine whether the City's Mobile Data Terminals have the minimum requirements for the solution at the time of interest.

3. The video will only be stored on the Mobile Data Terminals for a maximum of 2 days before it is automatically uploaded to the storage server or manually transferred.
- iv. These estimates are for budget and planning purposes only.
- c. Storage Requirements Calculation Logic
 - i. The following storage calculations provide the details incorporated into our estimates.

Server Storage

# Cameras	Bit Rate	# of Hours	# of Days	Total MB	Total GB	Total TB
20	512	6	30	829440	829.44	0.82944

Mobile Data Terminal Storage

# Cameras	Bit Rate	# of Hours	# of Days	Total MB	Total GB	Total TB
1	512	6	2	2764.8	2.7648	0.00276

15. Mobile Noise Complaint Inspection Pilot

IBM will provide a 60 trial of a hand held mobile noise complaint solution. Specifics of the trial include:

- a. Creation of one Noise Complaint Inspection Form
- b. 60 day trial to include evaluation software licenses
- c. One way upload to backend complaint system
- d. Data and forms are hosted at an ASP for trial period
- e. Hardware evaluation units can be arranged
- f. \$15,000 charge for pilot execution and support by IBM

16. Project Management Office

IBM's project management office consists of the following:

- a. Single Point of Contact (SPOC) through its project management office.
- b. Staffed by a senior PMI certified project manager
- c. An IT Architect
- d. Network Specialists
- e. Administrative support
- f. IBM advocates telecommuting, so this staff will not necessarily work from one physical location.
- g. IBM's project team including customer support and technical resources will report through the IBM Project Office to the IBM Project Manager.
- h. The IBM Project Manager will report directly to the City of Miami Beach's designated project manager for the wireless project.
- i. IBM will commit to utilizing network and office space at the Old City Hall location or a location to be determined with the City in order to provide a location for server hardware and physical work space for on the ground team members.
- j. Additionally, IBM may wish to work with the City to establish a physical office within the City of Miami Beach and will coordinate with the City to determine the details of such an arrangement. The local IBM team currently operates out of the Coral Gables facility where IBM has been based for the last 15 years.

17. Sponsorship Marketing and Marketing Support

IBM will coordinate a promotional campaign in conjunction with the City of Miami Beach to include:

- a. Press releases
- b. White papers
- c. Internal and external promotional pieces
- d. IBM will work with the City of Miami Beach to ensure the City is represented at business shows and trade fairs.
- e. IBM will collaborate with the City of Miami Beach to develop joint opportunities to host IBM Customer Executive Events.
- f. IBM will host one significant event each year in the City of Miami Beach.
- g. IBM will induct the City of Miami Beach into the Executive Contact Program, which creates strategic links between the top City officials and a senior IBM executive in order to showcase IBM Company and community activities, including initiatives and grants.

18. IBM Scripps Infectious Disease Research

On February 16 an announcement was made by IBM, Governor Jeb Bush, and Scripps to unveil the details of an exciting collaboration on pandemic research to be headquartered in South Florida. IBM and Scripps are already working on a similar project based in California in which over 200 million computational cycles have been generated and analyzed for HIV treatment research.

IBM invites the City to join forces with other governmental agencies who are participating in this project.

19. IBM Institute for Electronic Government

The City can showcase its technology at IBM's Institute for Electronic Government in Washington D.C. Since it opened in 1996, over 25,000 government leaders from around the world have visited the IEG for customized meetings, for tours of the 15,000 square feet of demonstration space, for collaboration and idea-exchange with their peers and IBM executives and staff who have deep experience in the business of state and local government. This is a win-win for IBM and for the cities that are featured at the IEG, IBM's briefing center dedicated to eGovernment.

<http://www-1.ibm.com/industries/government/ieg/index.html>

IBM invites the City of Miami Beach to be featured at the IEG Briefing Center

20. Piggyback User Access

The City of Miami Beach and IBM agree that IBM will participate in a joint purchase option and entity revenue sharing agreement with respect to other governmental, quasi-governmental or not-for-profit entities located within or outside of the geographical boundaries of the City of Miami Beach.

- a. Only entities approved by the City of Miami Beach are eligible to utilize or receive City contract pricing and terms and conditions.
- b. The City shall have no liability to IBM for the cost of any purchase made by an ordering entity under this joint purchase and shall not be deemed to be a party thereto.
- c. All orders shall be placed directly by the ordering entity with IBM and shall be paid by the ordering entity.

SCHEDULE XXIV

OBLIGATIONS OF THE CITY OF MIAMI BEACH

The City of Miami Beach Responsibilities

The successful completion of the proposed effort depends on the full commitment and participation of The City of Miami Beach management and personnel. The responsibilities listed in this section are in addition to those responsibilities specified in the Agreement, and are to be provided at no charge to IBM. IBM's performance is predicated upon the following responsibilities being fulfilled by The City of Miami Beach as scheduled in the project plan. Delays in performance of these responsibilities may result in additional cost and/or delay of the completion of the project, and will be handled in accordance with Project Change Control Procedure.

1. The City of Miami Beach General Responsibilities

1. Make appropriate personnel available to assist IBM in the performance of IBM's responsibilities as appropriate.
2. Provide building access for IBM project personnel on an escorted basis. Most of the work involved in this project will be performed during normal working hours (8:00am to 5:00pm). However, on some occasions, The City of Miami Beach may need to provide access to facilities outside of these hours.
3. Be responsible for the City internal network, content of any database, the selection and implementation of controls on its access and use, backup and recovery and the security of the stored data. This security will also include any procedures necessary to safeguard the integrity and security of software and data used in the Services from access by unauthorized personnel.
4. Be responsible for the identification and interpretation of any applicable laws, regulations, and statutes that affect your existing application systems or programs that IBM will have access to during the Services. It is your responsibility to assure that the systems and programs meet the requirements of those laws, regulations and statutes.
5. Authorize IBM and its subsidiaries (and their successors and assigns, contractors and IBM Business Partners) to store and use your business contact information wherever they do business, in connection with IBM products and Services or in furtherance of IBM's business relationship with you.
6. If you make facilities, software, hardware, networks or other resources available to IBM, you are responsible for obtaining any licenses or approvals related to such resources that may be necessary for IBM or its subcontractors to perform the Services, including the development of any deliverables. Notwithstanding the above, the Vendor remains required to comply with all Federal, State and local ordinances, rules, regulations, codes, laws and permitting processes as required. IBM will be relieved of its obligations to the extent your failure to promptly

obtain such licenses or approvals adversely affects IBM's ability to perform its obligations. If a third party asserts a claim against IBM as a result of your failure to obtain these licenses or approvals, you agree to reimburse IBM for any costs and damages IBM may reasonably incur in connection with such claim.

2. The City of Miami Beach Project Manager

Prior to the start of this Statement of Work under the *Agreement*, The City of Miami Beach will designate a person, called the City of Miami Beach Project Manager, to whom IBM communications will be addressed and who has the authority to act for The City of Miami Beach in all matters regarding this SOW.

The City of Miami Beach Project Manager's responsibilities include:

1. Serve as the interface between IBM and all The City of Miami Beach departments, organizations and sites participating in this project.
2. With the IBM Project Manager, develop the project plan prior to implementation.
3. With the IBM Project Manager, administer the Project Change Control Procedure.
4. Attend project status meetings.
5. Obtain and provide information, data, decisions and approvals, within five (5) working days of IBM's request, unless both IBM and The City of Miami Beach agree to an extended response time.
6. Help resolve project issues and escalate issues within the City of Miami Beach organization, as necessary.